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ANDROGYNY AND SEX-ROLE MEASUREMENT:  
A PERSONAL CONSTRUCT APPROACH

DISSERTATION

Presented to the Graduate Council of the  
North Texas State University in Partial  
Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

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Denton, Texas

December, 1984

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Baldwin, Amy Caroline, Androgyny and Sex-Role Measurement: A Personal Construct Approach. Doctor of Philosophy (Clinical Psychology), December, 1984, 131 pp., 13 tables, 4 figures, references, 45 titles.

Recent research into sex roles has been heavily influenced by androgyny theory, and by the development of the Bem Sex-Role Inventory (BSRI; Bem, 1974). Psychological androgyny is the combination, in one individual, of both culturally defined masculine and feminine personality traits. The Sex-Rep, a new instrument for assessing sex role which is aimed at rectifying certain problems associated with the BSRI, was then described.

The Sex-Rep, the BSRI (Bem, 1974), the Texas Social Behavior Inventory (TSBI; Spence & Stapp, 1974), the Beck Depression Inventory (BDI, Beck, 1967), and a self-concept thermometer, were given to 100 male and 108 female undergraduates. Results indicated that the BSRI and the Sex-Rep are both valid sex-role instruments, insofar as they both discriminate between males and females. They tend to measure nonredundant components of sex role as indicated by a lack of overlap between their sex-role classifications.

The present study did not find any support for the balance model of androgyny which suggests that high masculinity and high femininity interact by balancing each other to produce a healthier, more behaviorally flexible individual. BSRI

masculinity (M) was strongly related to adjustment in both sexes, but BSRI femininity (F) had little impact. This relationship between BSRI M and adjustment was described as probably resulting from measurement artifact since (a) only socially desirable traits are included on the BSRI, (b) removing self-esteem effects from the BSRI M scale enhanced its ability to discriminate between the sexes, (c) Sex-Rep masculinity was not related to adjustment for women, and its linkage to adjustment for men was less strong than BSRI M, (d) women rated their feminine constructs as more desirable than their masculine constructs, and (e) there were no actual self-esteem differences between males and females.

Thus, findings from the BSRI regarding the relationship between sex role and adjustment must be called into question. Furthermore, since there is little overlap between gender-related personal construals and social stereotypes, it is important to discover the effects of personal gender identity on personality and behavior.

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## ANDROGYNY AND SEX-ROLE MEASUREMENT:

### A PERSONAL CONSTRUCT APPROACH

Recent research into sex roles has been based on psychological androgyny, the combination of both masculine and feminine traits in a person of either sex. It was Carl Jung who first popularized the idea that every individual possesses both a masculine and a feminine element. Present day theorists typically define androgyny as the merging, in one individual, of culturally defined masculine and feminine personality traits. This combination of traits is thought to represent an ideal balance. Androgynists maintain that this balanced, adaptable character structure is clearly preferable to the one-sided masculine or feminine structure of the sex-typed individual. Presumably, individuals who operate from both a masculine and feminine perspective have the best of both worlds and are selectively able to call upon either, depending on which behaviors and attitudes are more adaptive in a given situation (Warren, 1980).

Aside from this increased flexibility, androgynous people are thought to be better adjusted than sex-typed individuals. This idea stems in part from the conceptualization of androgyny as a combination of socially desirable masculine and feminine traits. Since androgynous people possess both masculine and feminine virtues, they are better off than sex-typed individuals,

who possess only one set of virtues. Both the androgynous and the sex-typed groups are better off than the undifferentiated group who possess neither set of virtues. To many feminists, androgyny represents freedom from the prison of gender and the prescribed ways in which men and women are supposed to differ in their behavior (Warren, 1980). Although such reasoning is appealing, there is reason to question both these assumptions and the empirical evidence which has been gathered to support them. The present paper discusses a number of problems in the current measurement of sex roles, and suggests a different approach to assessment which may help explicate the relationship between sex role and adjustment.

#### A Brief History of Androgyny Research

Androgyny theory led to the development of sex-role inventories in which one could simultaneously endorse both masculine and feminine traits as descriptive of the self. To this end the Bem Sex Role Inventory (BSRI; Bem, 1974) was created. Other similar inventories have followed, most notably the Personal Attributes Questionnaire (PAQ; Spence, Helmreich, & Stapp, 1974). Both the BSRI and the PAQ contain masculinity (M) and femininity (F) scales that are essentially orthogonal. These scales consist of a series of trait descriptors that are socially desirable for both sexes. Items on the M scales were judged more typical of men, while those on the F scales were judged more typical of women. The BSRI contains a third scale designed to check for the effects of social desirability.

It consists of both desirable and undesirable items which are supposedly neutral with regard to sex, and it is not used in the classification of persons into sex-role groups. The PAQ contains a masculine-feminine (M-F) scale which contains items judged to be differentially desirable for men and women. The M-F scale is not used to classify subjects into sex-role groups and its usefulness is unclear. On the basis of the BSRI and the PAQ, individuals are generally classified into one of four groups from a median split of the M and F scores of males and females combined: androgynous (high M, high F), masculine (high M, low F), feminine (high F, low M), and undifferentiated (low M, low F) (Helmreich, Spence, & Holohan, 1979).

Originally, Bem (1974) recommended that sex-role classification be defined on the basis of a Student's  $t$ -ratio for the difference between total points assigned to the M and F scales respectively. Thus, people were classified as masculine if their M score was significantly higher than their F score, feminine if their F score was significantly higher than their M score, and androgynous if there was no significant difference between M and F scores. This scoring system was discarded by Bem (1977) after Spence, Helmreich, and Stapp (1975) pointed out that such a definition of androgyny obscured the potentially important differences between those who score high on both M and F and those who score low on both M and F.

Equipped with the BSRI and the PAQ, which were based on the assumption that masculinity and femininity are orthogonal,

i.e., they are not opposite ends of a bipolar continuum, researchers set out to determine the merits of androgyny theory. Initial studies showed that androgynous individuals were better adjusted than sex-typed individuals on a number of measures. These measures included behavioral flexibility (Bem, 1975; Bem & Lenney, 1976; Falbo, 1975; Orlofsky & Windle, 1978; Martyna & Watson, 1976), achievement motivation (Spence & Helmreich, 1978), and self-esteem (Bem, 1977; O'Connor, Mann, & Bardwick, 1978; Spence et al., 1975; Spence & Helmreich, 1978). These results were enthusiastically received, and by 1977 introductory psychology textbooks informed college students that research showed androgynous people to be more well adjusted than other sex-role groups (McNeill & Rubin, 1977). Since that time however, the validity of the BSRI and PAQ as measures of masculinity and femininity has been called into question. Moreover, a general consensus is emerging that it is BSRI masculinity, not androgyny which predicts adjustment for both sexes (Taylor & Hall, 1982).

#### Statistical Criticisms of the BSRI and PAQ

Pedhazur and Tetenbaum (1979) had graduate students rate the desirability of BSRI traits for one of three reference groups: American man, American woman, or American adult. Regardless of the referent, masculine traits were rated high in social desirability while feminine traits were rated only somewhat desirable or undesirable. Factor analyses revealed

no evidence that the traits on the BSRI represent the three subsets proposed by Bem (1974): masculinity, femininity, and social desirability. Instead, three factors emerged with the first consisting primarily of the masculine traits and the remaining two factors consisting of mixtures of the feminine and neutral traits. The principal distinction between the latter two factors was that one was considered relatively desirable for the reference groups while the other was considered relatively undesirable for the reference groups.

Pedhazur and Tetenbaum (1979) also had graduate students respond to the BSRI using Bem's directions. Except for very large differences between males and females on the traits "masculine" and "feminine," and a fairly large difference on the trait "athletic," all differences between males and females on mean ratings of traits were small. On a 7-point scale, they ranged in value from .01 to .47 with a median difference of .16. The overall mean ratings of traits showed that both males and females reported that "it is often true" that both M and F traits described them. Discriminant analyses revealed that the use of all 60 BSRI traits provided 98.3 percent correct classification of males and females. However, the function based only on the two traits "masculine" and "feminine" provided 97.7 percent correct classification. Pedhazur and Tetenbaum concluded that the ability of the BSRI to discriminate between the sexes is primarily due to only two trait descriptors.

This is important, since the BSRI's basic claim to validity as an index of masculinity and femininity is its ability to discriminate between men and women.

Factor analyses of self-ratings of men and women did not show the masculinity and femininity dimensions suggested by Bem. Rather, a set of four factors emerged for men, and a substantially different set of four factors emerged for women. In each case, the traits "masculine" and "feminine" loaded together to describe a separate bipolar dimension. Pedhazur and Tetenbaum suggested that Bem's attempt to construct a measure of masculinity and femininity failed because it was based on an approach in which trait selection was determined by a large number of nonindependent univariate tests of significance. They noted that relying solely on tests of significance may cause one to overlook the difference between statistically significant and substantively meaningful findings. They also pointed to the lack of a theoretical definition of masculinity and femininity, stating that the validity of an instrument cannot be determined when the constructs it supposedly measures remain undefined. On the basis of their research, Pedhazur and Tetenbaum concluded that there was enough evidence to reject Bem's operational definition of androgyny.

#### Theoretical Critiques of the BSRI and the PAQ

A cogent theoretical critique of both the BSRI and the PAQ has been presented by Locksley and Colten (1979). They

noted the rapid acceptance of the above measures and suggested that androgyny theory has not been subjected to the usual rigorous scientific scrutiny because of its political implications. They questioned the appropriateness of using measures designed to tap general perceptions of aggregate male-female differences as measures of individual differences. More specifically, the underlying assumption of the BSRI and the PAQ is that different frequencies of attributing adjectives to the typical man and woman indicate beliefs about covariates of sex, and that these are relevant for self-description. Locksley and Colten suggested that general stereotypes may be too global for interpreting and guiding behavior at the level of individual self-perception. When describing the typical man and woman, the respondent has no information about them. On the other hand, a person is equipped with a great deal of information when asked to rate the self. Since sex-stereotype research has shown that the impact of stereotypes on social inference and prediction is diluted when more information is given, stereotypic adjectives may have little salience for self-description. Thus, current sex-role inventories may classify large numbers of subjects as androgynous merely because they fail to tap the most salient dimensions of sex differentiation in personality and behavior. If BSRI traits are not traits which would have relevance for sex discrimination at the individual level, then it might be easy for subjects to cross gender lines when rating themselves on those traits.

Further arguments were made which questioned the assumption that BSRI and PAQ traits retain their sex-associated characteristics when used to describe the self. The rating of self implies a comparison process. Since this process is left undetermined by the BSRI and the PAQ, respondents may use a variety of inferential contexts. Locksley and Colten gave the following clarifying example:

Respondents asked to describe themselves use different inferential contexts which may alter the sense of a given term from that afforded by its original context. For example, when thinking of the ideal housewife/mother, loyalty (an item on the BSRI femininity scale) would seem to be a salient feature of the mother's feelings about her family. On the other hand, a football jock may think of loyalty in the sense of loyalty to his buddies or to his team. . . This concept of loyalty is hardly indicative of femininity or of emulation of a female sex stereotype. . . Referential vagaries. . . contribute to a surface impression of equivalence not necessarily supported by the underlying evidence (Locksley & Colten, 1979, pp. 1023-1024).

A final criticism of androgyny theory, noted by Locksley & Colten, was directed at its assumption that sex typing per se is dysfunctional, and that men are as disadvantaged by it as women. Their review of previous research indicated that BSRI and PAQ masculinity was better than androgyny at predicting adjustment and flexibility for both sexes.



## Masculinity Versus Androgyny as a Predictor of Psychological Adjustment

Deutsch and Gilbert (1976), using a self-report measure of mental health, found that androgynous women described themselves as better adjusted than sex-typed women. However, sex-typed men scored higher on adjustment than androgynous men. They concluded that masculinity rather than androgyny predicted positive mental health.

Silvern and Ryan (1979) also found superior adjustment to be associated with androgynous rather than traditional typing only among women. This effect occurred using both Bem's (1974) old t-test criterion and the newer median-split method of classifying subjects. In the case of every comparison between sex-role groups, the group that was high in masculinity was higher in adjustment. They proposed that Bem's inclusion of relatively undesirable items on the F scale might have artificially reduced the relationship between femininity and self-rated adjustment.

Silver and Ryan (1979) conducted a second study in which those items which Pedhazur and Tetenbaum (1979) called undesirable were excluded from the F scale. Nevertheless, the pattern of results remained the same. It is possible however, that this occurred because even those feminine items rated as somewhat desirable are still less desirable in degree than M items.

Antill and Cunningham (1979) gave both the PAQ and the BSRI to undergraduates. They found that self-esteem generally increased from the feminine to the masculine categories. In every case, masculinity showed significant positive correlations with self-esteem in both sexes. The correlations between femininity and self-esteem were generally nil or slightly negative.

In an attempt to replicate Bem and Lenney's (1976) work which found greater behavioral flexibility among androgynous individuals of both sexes, Helmreich et al. (1979) had college students rate their comfort performing masculine, feminine, and neutral tasks. Results indicated that androgynous and masculine subjects had higher comfort ratings than did feminine and undifferentiated subjects, independent of the type of task. Note that those groups with high comfort ratings all scored above the median on masculinity, whereas the low comfort groups scored below the median on masculinity, indicating that masculinity, not androgyny, predicts greater behavioral flexibility for both sexes.

#### Androgyny as an Interactive Concept

Taylor and Hall's (1982) review of the literature lends strong support to arguments that masculinity rather than androgyny predicts adjustment for both sexes. They advocated analyzing the data via a two-way ANOVA (high M, low M) X (high F, low F) which would allow researchers to examine the effects of androgyny apart from the main effects of masculinity and

femininity; rather than classifying people into sex-role groups on the basis of a median-split of M and F scores, and then analyzing the data via a one-way ANOVA over sex-role classifications. After reexamining the data from this perspective, they concluded that there is a strong positive relationship between masculinity and adjustment for both sexes, but no consistent relationship between femininity and adjustment in either sex. Furthermore, they concluded that there is no support for the balance model of androgyny, which suggests that high masculinity and high femininity interact by balancing each other to produce a healthier, more behaviorally flexible individual.

Unlike others before them who have also noted the masculine advantage but who have attributed it to artifact (Locksley & Colten, 1979; Silvern & Ryan, 1979), Taylor and Hall viewed the M and F scales of the BSRI and the PAQ as valid indices of masculinity and femininity. They suggested that masculinity is in fact healthier in our society than femininity, and that this is a societal problem which should be addressed. They dismissed the problem of social desirability differences between the BSRI M and F scales in two ways.

First, Taylor and Hall questioned whether or not such differences actually exist in general. Since desirability differences apparently did not exist in Bem's (1974) original sample, and since Silvern and Ryan's attempt to exclude undesirable F items failed to uncover a relationship between

femininity and adjustment; they concluded that there was no unequivocal evidence for M and F desirability differences. Perhaps Taylor and Hall have dismissed this question too quickly. In fact there is one study (Bem, 1974) where no desirability differences appear to have been present, one study in which desirability differences were present (Pedhazur & Tetenbaum, 1979), and one study which did not directly address the question (Silvern & Ryan, 1979).

Second, Taylor and Hall proposed that even if desirability differences did exist, that would be insufficient reason to overturn the substantive conclusion that it is masculinity which is most adaptive for both sexes. "In the case of social desirability, if the traits associated with men are more valued than those associated with women in this society, that is a fact to be squarely acknowledged, not camouflaged by scale adjustments. Such differences are not artifact--they are the point. Artificially creating a socially desirable femininity scale in order to demonstrate positive effects of femininity would make the whole research enterprise misleading" (Taylor & Hall, 1982, p. 361).

The present author agrees that artificially creating a socially desirable F scale would be misleading. Taylor and Hall, however, have overlooked the fact that both the M and F scales of the BSRI and the PAQ already represent an artificial selection of characteristics, since they consist only of socially desirable traits. Artificially creating socially

desirable sex-role scales in order to demonstrate positive effects of both masculinity and femininity is misleading in itself. By defining the androgynous individual as one who has a high number of both masculine and feminine virtues, and by including only the desirable aspects of masculinity and femininity, researchers have stacked the deck in favor of demonstrating a positive relationship between their sex-role scales and health. A true test of the hypothesis that a combination of high masculinity and high femininity result in a healthier individual, would require M and F scales which contain both positive and negative components of masculinity and femininity. Rather than constructing M and F scales which are equally and highly desirable, it would be more appropriate to construct M and F scales which representatively sample desirable and undesirable masculine and feminine traits as these are defined in our society. Neither the M nor F scale of either the BSRI or the PAQ has done this.

Bem (1974) recognized that including only desirable items on the BSRI might present problems. She stated that "Because of the fact that the masculine and feminine items are all relatively desirable, even for the 'inappropriate' sex, it is important to verify that the androgyny score is not simply tapping a social desirability response set" (Bem, 1974, p. 159). She reported that both masculinity and femininity were correlated with social desirability, whereas there were near-zero correlations between androgyny and social desirability. These results were interpreted as confirming that androgyny scores

do not measure a general tendency to respond in a socially desirable direction. At that time however, Bem was using the t-test scoring method which has been described elsewhere in this paper. The reader is reminded that this method classifies not only subjects scoring high on both M and F as androgynous, but also classifies subjects scoring low on both M and F as androgynous. Since M and F scores are both positively related to social desirability, combining the high and low scorers would be expected to depress the correlation with social desirability. Furthermore, now that it is clear that it is masculinity which predicts adjustment, the finding that M scores are correlated with a socially desirable response tendency becomes an important issue.

Lubinski and his colleagues investigated the relationship between sex-role classification and psychological well-being in a series of articles (Lubinski, Tellegen, & Butcher, 1981; Lubinski, Tellegen & Butcher, 1983; Tellegen & Lubinski, 1983). Like Taylor and Hall (1982), they proposed that since androgyny was first cast as an interactive concept it should be investigated as such by either an analysis of variance procedure or a regression model. Using hierarchical multiple regression procedures, they were unable to find any support for the hypothesis that an M X F interaction was positively related to various measures of psychological well-being. These results held regardless of whether M and F were defined on the basis of the BSRI or the PAQ. Their results were consistent with

other recent studies, in that masculinity appeared to be substantially related to adjustment whereas femininity was not.

Lubinski et al. (1983) administered the Differential Personality Questionnaire (DPQ; Tellegen, 1982) along with the BSRI and PAQ in order to elucidate the constructs measured by M and F. The DPQ contains the following 11 subscales: Well-being, Social Potency, Achievement, Social Closeness, Stress Reaction, Alienation, Aggression, Control, Harm Avoidance, Traditionalism, and Absorption. These subscales mark three higher order factors called Positive Affectivity, Negative Affectivity, and Constraint. Based on the pattern of correlations between the M and F scales of the BSRI and PAQ and the DPQ subscales, Lubinski et al. (1983) concluded that ". . .high masculinity scores reflect a view of oneself as interpersonally effective and dominant. . .indeed. . .inspection of the content of the masculinity items indicates that the domain sampled could quite adequately be labeled dominance-poise. . .Therefore, some association between these masculinity measures, and markers of positive affectivity is expected. . . Unlike masculinity, femininity is primarily related to 'nurturance and accommodating warmth'" (Lubinski et al., 1983, p. 433). Lubinski et al. interpreted their findings as leading to the straightforward conclusion that masculinity, in the sense of dominance-poise, should be encouraged in men and women alike.

What appears to have taken place is that researchers have developed a masculinity scale which primarily taps dominance-poise, which is essentially self-confidence. That "dominance-poise" is essentially the same as self-confidence or self-esteem, is clear from the fact that many M items are actually found on self-esteem scales (Bills, 1955); and from the fact that the TSBI, which is commonly used to measure self-esteem, yields four correlated factors: dominance, confidence, social competence, and social withdrawal. Next, the scale was correlated with self-esteem inventories and other measures of social well-being. The findings, of course, were that high M predicted self-esteem. In other words, the findings were essentially tautological; self-confidence predicts self-esteem and self-esteem is related to adjustment in both sexes. If masculinity is predefined via social stereotypes as self-confidence, then the relationship between masculinity and psychological health has also been predefined.

#### Responses to Criticisms

Naturally these criticisms of androgyny theory, the BSRI and the PAQ have not gone unanswered. Helmreich, Spence, and Wilhelm (1981) maintained that despite similarities in test content and construction, a factor analytic study of the BSRI (Pedhazur and Tetenbaum, 1979) cannot be legitimately used to discount the validity of the PAQ. They conducted a psychometric analysis of the PAQ and a version of the PAQ which includes socially undesirable traits, the Extended Personal Attributes Questionnaire (EPAQ; Spence, Helmreich & Holohan,



1979). They used a short form of the PAQ consisting of three 8-item scales: masculinity (M), femininity (F), and masculinity-femininity (M-F). M items tend to be goal-oriented, instrumental traits; F items tend to be interpersonally-oriented, expressive traits; and the M-F scale contains both instrumental and expressive items. Significant sex differences have been found on all three scales. Males endorse more M and M-F items while females endorse more F items.

The EPAQ was developed in response to interest in socially undesirable components of masculine instrumentality and feminine expressivity. It contains a negative masculinity scale ( $M^-$ ), which consists of traits judged to be more typical of males but socially undesirable in both sexes. It also contains two negative femininity scales ( $Fc^-$ ) and ( $Fva^-$ ). Items on those scales were judged more typical of women but socially undesirable in both sexes.

The PAQ was given to the following groups: male and female high school students, male and female college students, and mothers and fathers. The EPAQ was given to male and female college students. Results indicated that the M and F scales can be reproduced factor analytically, and that the factor structure is consistent in both sexes. The authors viewed this as reassuring evidence in support of the PAQ's conceptual structure.

The negative scales of the EPAQ produced low correlations with their parallel positive scales and substantial negative

correlations with their opposite positive scales. This indicates bipolarity for these traits. Unlike the M and F scales, the  $M^-$ ,  $Fc^-$ , and  $Fva^-$  scales produced a differential factor structure for males and females that did not support the authors' conceptual structure. However, they chose to retain the scales because of their ability to discriminate between the sexes. Although the EPAQ is an interesting development, so far it has not been integrated into androgyny theory. The factor structure of its scales is unclear, and the scales have not been used for the classification of individuals into sex-role groups.

Spence and Helmreich (1979) have essentially agreed with most of the Locksley and Colten arguments. They stated, however, that their classifications are labeled masculine, feminine, and androgynous "strictly for mnemonic purposes" and that the term androgynous was introduced simply as "a convenient label" with "no theoretical import, being intended to indicate nothing more than a relatively high degree of both instrumental and expressive traits as defined by the PAQ" (Spence & Helmreich, 1979, p. 1035). They denied that persons labeled androgynous on the basis of the PAQ have any claim to greater flexibility in sex-role behavior. Most importantly, they stated that neither the PAQ nor the BSRI is an adequate measure of masculinity and femininity in general, and blasted Bem for her continued use of the BSRI as such. Specifically, they proposed that the search for global measures of

masculinity and femininity is a snare and a delusion "partly because the classes of psychological attributes. . .that distinguish between men and women at a given time and a given culture are not only multitudinous but also may have different roots and may vary relatively independently across individuals" (Spence & Helmreich, 1979, p. 1045). They concluded that their empirical analysis of the PAQ justifies its continued use as a specialized measure of socially desirable instrumental and expressive characteristics. They stated that while many of the Locksley-Colten criticisms are valid with respect to the BSRI, they simply no longer apply to the present narrowly defined use of the PAQ.

Spence has repeatedly urged researchers not to use the PAQ as if it were a global measure of masculinity and femininity (Helmreich et al., 1979; Spence, 1982; Spence, 1983). In her reply to Lubinski et al. (1983), she reiterated this position and emphasized that the sex-role scales of the PAQ and the BSRI measure only what their empirical content suggests, i.e., dominance and nurturance-warmth (Spence, 1983). She also reiterated her position that androgyny, as used by her and her colleagues, was a purely nominal category with no surplus meaning attached. Therefore, the Lubinski et al. findings were not relevant to her research endeavors. Spence seems to have found herself in the unfortunate position of being repeatedly attacked on the basis of a set of theoretical propositions to which she does not even subscribe. Nevertheless,

she has contributed to the conceptual confusion by continuing to call her subscales M and F as well as by continuing to use the classifications masculine, feminine, and androgynous. She may be empirically justified in that practice since the scales do discriminate between the sexes. However, renaming the scales would go a long way towards clearing up conceptual confusion. The use of the terms "sex-role classifications" and "androgynous," "masculine," "feminine," and "undifferentiated" surely imply a connection to androgyny theory. To make matters worse, the terms masculine/instrumental and feminine/expressive are often used as if they were interchangeable. This leaves the impression that masculinity equals instrumentality and that femininity equals expressiveness.

#### Gender Schema Theory

In response to the Locksley-Colten and Pedhazur-Tetenbaum critiques, Bem (1979) asserted that the BSRI was a credible measure of masculinity and femininity, and that androgyny represented an ideal of mental health. She maintained that the development of the BSRI followed standard, traditionally accepted methods of test construction. She stated that the Pedhazur-Tetenbaum factor analyses "are not devastating. . . since the theory underlying the BSRI does not require that the domains of masculinity and femininity be unidimensional" (Bem, 1979, p. 1051). Still, she reported the development of a short form of the BSRI in which the masculine and feminine scales have been shortened so that their items represent the

more desirable characteristics of a given sex. To Locksley and Colten she said:

Like most psychological concepts, the concepts of sex typing and androgyny are seen as matters of degree. I too would agree with the rather unexceptional position that it is not possible to be completely free from sex related social effects, but that does not preclude the possibility that individuals differ in the extent to which gender serves as a cognitive schema for the processing of information, a lens through which they perceive and interpret social reality. Moreover my current research on the cognitive processes mediating sex typing is addressed to precisely this hypothesis (Bem, 1979, p. 1052).

Here Bem was referring to a highly theoretical account of sex typing which she calls gender schema theory. Its basic tenet is that sex typing is partly the result of gender-based schematic processing, i.e., a general readiness to process information via the sex-linked associations that constitute gender schema. A schema was defined as follows:

A schema is a cognitive structure, a network of associations that organizes and guides an individual's perception. A schema functions as an anticipatory structure, a readiness to search for and assimilate information in schema relevant terms. Schematic processing is thus highly selective and enables the individual to impose structure and meaning onto the vast array of incoming

stimuli. Schema theory. . .construes perception as a constructive process wherein what is perceived is a product of the interaction between the incoming information and the perceiver's preexisting schema (Bem, 1981, p. 355).

She went on to say that the process of sex typing not only involves learning that the sexes differ on where they stand on an attribute, but involves the more profound lesson that the attributes themselves are differentially applicable to the two sexes. For example, the strong-weak dimension may be absent from the schema which is applied to girls, while the nurturance dimension may be absent from the schema which is applied to boys. She further hypothesized that sex-typed individuals are more likely than others to have learned this lesson, and that they have a greater readiness to process information in terms of gender schema.

Curiously, in her 1981 article, Bem shifted her focus away from the androgynous ideal and onto an implied rigidity of the sex-typed individual. She renounced her commitment to androgyny as an ideal, saying that androgyny theory is "insufficiently radical" since it implies that masculinity and femininity have a reality of their own, apart from being an individual's cognitive constructs (Bem, 1981, p. 363). The prescription to become both masculine and feminine is now viewed as "doubly incarcerating since the individual now has not one but two sources of inadequacy to contend with" (Bem,

1981, p. 363). Instead, "human behaviors and personality attributes should cease to have gender and society should stop projecting gender into situations irrelevant to genitalia" (Bem, 1981, pp. 362-363).

Although it seems reasonable to conceptualize sex role in terms of gender schematic processing, the connection between gender schema theory and the BSRI is tenuous. In no way can its static list of stereotyped traits capture the dynamic and individualized construal process Bem spoke of. It would appear that a measure which would allow individuals to actively describe their view of sex-role differences would come closer to describing gender-schematic processing.

#### Measuring Sex Role Via Personal Constructs

The preceding review of the literature indicates that when sex role is measured via the BSRI or the PAQ, masculinity shows a strong relationship to self-esteem and other adjustment measures, whereas femininity does not. There is evidence that in some samples (Pedhazur and Tetenbaum, 1979) M items are perceived as more desirable than F items. If this is true, and the BSRI and PAQ group together a number of very desirable, positive traits under the heading "masculine" and a number of only moderately positive traits under the heading "feminine," it should come as no surprise that those who score above the median on masculinity (masculine and androgynous individuals) appear to be better adjusted than those who score below the median on masculinity (feminine and undifferentiated individuals).

The issue of differential M and F scale desirability, however, is secondary to the artificial selection of only socially desirable traits. Since M and F traits are socially desirable for both sexes, individuals of either sex who identify with a large number of these traits are likely to be more well adjusted. The entire approach to evaluating the relationship between androgyny and mental health has been circular, in that only individuals scoring high in healthy, desirable traits are classified as androgynous. This circularity is especially apparent in the relationship between M scores and adjustment. If masculinity has been predefined as self-confidence, as noted earlier, then the relationship between masculinity and psychological health, which is typically operationalized as self-esteem, has been artifactually predetermined.

The EPAQ has provided evidence that adjustment may be more related to the positiveness of one's self-image than to sex role per se. For example, Spence et al. (1979) found that M scores were significantly related to acting-out behavior in a college sample. This supports the notion that masculinity can be healthy or unhealthy depending on whether it is defined by desirable or undesirable traits. A more accurate assessment of the relationship between sex role and adjustment might be that any sex role group will contain both healthy and less healthy people. One's degree of adjustment may be partly determined by whether or not one is able to construe one's



masculinity, femininity, androgyny, etc. in a positive, adaptive way. The important point here is not just that individuals with a high degree of self-acceptance are better adjusted, but rather that individuals can actively construe any sex role so that it contains adaptive, positive traits.

For example, if a woman views herself as highly feminine because she identifies strongly with her mother, and her mother was a single parent who worked diligently to support her family, this woman may construe hard work, dominance, leadership, and nurturance as being most characteristic of femininity. The BSRI would probably classify this individual as androgynous, or perhaps even cross-sex-typed, despite a markedly feminine self-view. If two men have a strong sense of gender identity, yet one construes masculinity as toughness and insensitivity and the other construes masculinity as being strong and involved with one's family, they are likely to differ markedly in their degree of adjustment. Since the BSRI and PAQ assign traits to the M and F scales a priori, they can tell us little about how individuals construe masculinity and femininity.

As noted earlier, the BSRI and PAQ have been criticized on a number of other counts, including: (a) a lack of theoretical underpinnings, (b) a failure to tap the most salient dimensions of sex differentiation in personality and behavior, and (c) a failure to provide a comparative context for self-description (Pedhazur & Tetenbaum, 1979; Locksley & Colten, 1979). What is needed is a sex-role inventory which would not

assign traits of preselected desirability to the M and F scales a priori, which would be securely tied to theory, which would tap the most salient dimensions of sex differentiation for each individual, and which would provide a comparative context for the gender constructs used.

In light of these considerations, it appears that Kelly's Role Construct Repertory Test (Rep Test; Kelly, 1955) may provide an ideal vehicle for the investigation of masculinity and femininity constructs.

The Rep test is designed to reveal an individual's current process of viewing the world by eliciting a sample of their personal constructs. Subjects are asked to compare a number of people with whom they have had to deal in their lives. They are taken through various sorts in which they tell how two people are alike and yet different from a third. These comparisons yield bipolar constructs which are highly idiosyncratic in nature. That is, a person's constructs reflect their own thinking and thus may be quite different from typical dichotomies. For example, the construct "competent" versus "questioning" may emerge. This person's way of organizing interpersonal experience is not what one might have assumed since the opposite pole of "competent" is "questioning" rather than its dictionary opposite "incompetent" (Rychlack, 1973). The Rep test assumes that constructs are bipolar in nature, and the structure of the test encourages identification of both construct poles. However, in no way

is an individual forced into a preconceived dichotomy. Thus he will represent masculinity and femininity as bipolarities only if this reflects his way of organizing information. In a like manner, when asked to compare masculine and feminine people with other individuals, only those constructs which represent the individual's own perception of masculinity and femininity will emerge. Therefore, these constructs should represent the most salient dimensions of sex differentiation for each individual. Any positive or negative valence tied to the constructs representing masculinity and femininity should be reflections of the individual's own thinking and not a source of error built into the test. Finally, the Rep test is securely tied to Kelly's theory of constructive alternativism (Kelly, 1955).

Constructive alternativism subsumes the notion of sex roles as well as Bem's gender schema theory. Kelly described the central ideas behind his theory as follows:

The universe is real; it is happening all the time; it is integral; and it is open to piecemeal interpretation. Different men construe it in different ways. Since it owes no prior allegiance to any one man's construction system, it is always open to reconstruction. Some of the alternative ways of construing are better adapted to man's purposes than are others. Thus man comes to understand his world through an infinite series of successive approximations (Kelly, 1955, p. 43).

Man organizes his world by means of constructs.

Constructs are like "transparent patterns or templates" which man has created. . .in order to fit over the recurring realities of life. They begin in abstraction and generalization, but they are also imposed upon events so that man influences his psychological experience as much as events have influenced him. . .The construct is an identifiable, patterned structure or style of viewing life (Rychlack, 1973, p. 475).

The reader may note here a striking similarity between the notion of a schema and that of a construct. Masculinity and femininity may be viewed as constructs by which people organize incoming information so as to make sense out of and be able to predict events. The constructs of masculinity and femininity may be superordinate for some, subsuming a number of other constructs, and yet be relatively unimportant and subordinate to others. Their range of convenience, i.e., the number of situations in which they apply, as well as their content may vary from person to person. Thus the best way to assess masculinity and femininity may be to somehow access the construct system. This, of course, is precisely what the Rep test does.

The Rep test can be modified to include comparisons involving the self, people who are considered masculine, and people who are considered feminine. If it is assumed that comparisons involving the masculine and feminine persons will

yield masculine and feminine constructs respectively; then it seems reasonable to employ the Rep test for arriving at a classification of perceived sex role. Those who rate themselves above the median (in the feminine direction as defined by the pole of the construct said to be characteristic of the feminine person) on their femininity constructs and above the median (in the masculine direction as defined by the pole of the construct said to be characteristic of the masculine person) on their masculinity constructs will be classified as androgynous. Those who rate themselves above the median on masculinity and below the median on femininity will be classified as masculine. Those who rate themselves above the median on femininity and below the median on masculinity will be classified as feminine. Those who rate themselves below the median on both masculinity and femininity will be classified as undifferentiated. Medians will be determined from the sums of ratings for the masculinity and femininity constructs of male and female subjects combined. The reader may note that this is essentially the same process of sex-role classification used by Bem and Spence except that M and F scores are determined from personal sex-role constructs instead of stereotypes. Equipped with this new index of perceived sex role, a number of hypotheses can now be tested.

### Hypotheses

Hypothesis 1. Masculinity and femininity, as measured by the BSRI, are related to an individual's idiosyncratic

interpretation of sex-role attributes. If this is the case, as Bem maintains, then Sex-Rep M and F scores should be significantly related to BSRI M and F scores, and there should be significant overlap between BSRI and Sex-Rep sex-role classification.

Hypothesis 2. The Sex-Rep is a valid sex-role instrument. If this is true, then Sex-Rep M and F scores should be related to sex, and should discriminate between the sexes.

Hypothesis 3. The Sex-Rep is a more valid index of masculinity and femininity than the BSRI. If this is the case, then Sex-Rep M and F scores should be more highly correlated with sex than BSRI M and F scores. Also, Sex-Rep M and F should discriminate between the sexes better than BSRI M and F.

Hypothesis 4. Fewer people should be classified as androgynous by the Sex-Rep than by the BSRI. This hypothesis stems from Locksley and Colten's (1979) reasoning that the BSRI blurs the differences between the sexes by failing to use salient dimensions of sex differentiation, and by failing to provide a comparative context which would clarify the meaning of traits. The Sex-Rep was intended to rectify these problems. By eliciting personal constructs of masculinity and femininity directly from the individual in the context of comparing significant others with one another, and by obtaining self-ratings on sex-role constructs in the context of rating significant others as well, the Sex-Rep insures the use of salient descriptors whose meanings are clear to the individual.

Hypothesis 5. Masculinity is more desirable than femininity at the level of personal constructs, as well as at the level of societal stereotypes. If this is true then both men and women will rate Sex-Rep elicited masculine traits as more desirable than Sex-Rep elicited feminine traits. Such a finding would support Taylor and Hall's (1982) contention that any higher desirability of BSRI M items is an accurate reflection of real, culturally defined differences in the desirability of masculinity and femininity, rather than an artifact of stereotype selection.

Hypothesis 6. The use on the BSRI of personally irrelevant stereotypes has inflated the desirability of masculinity. If this is true then defining masculinity and femininity via the Sex-Rep's personal constructs should result in men rating masculine traits as more desirable than feminine traits, but women rating feminine traits as more desirable than masculine traits. This, of course, is in direct opposition to hypothesis 5 and would support the present author's contention that the BSRI's selection of highly desirable M items does not accurately reflect a generalized belief across sexes that masculinity is more desirable than femininity.

Hypothesis 7. Predefining masculinity as essentially self-confidence has artifactually inflated the relationship between M and adjustment.

Hypothesis 8. Undifferentiated individuals are better adjusted than those in other sex-role groups. If this is true,

then identifying sex-role groups via the Sex-Rep instead of the BSRI should result in higher adjustment for undifferentiated individuals compared to other sex-role groups. This hypothesis is based on Bem's (1981) reasoning that it is healthier to eliminate the connection between gender and personality attributes. The logical continuation of this reasoning is that the undifferentiated group should be the most well adjusted. Perhaps Bem did not carry her reasoning to its logical conclusion because of the data indicating that this group generally scores low on self-esteem and other adjustment measures. Ironically, the BSRI seems to have a built-in bias against the undifferentiated and feminine groups, as outlined earlier. This may have prevented a fair evaluation of undifferentiated individuals. The Sex-Rep, however, has no such built-in bias and it should provide a fair test of this hypothesis.

Hypothesis 9. Androgynous individuals are better adjusted than other sex-role groups. This hypothesis stems directly from androgyny theory's postulate that possessing high degrees of both masculine and feminine qualities represents an ideal of mental health.

Hypothesis 10. Individuals can actively construe any sex role in an adaptive way. If this is true, then classifying individuals into sex-role groups via their own personal constructs should eliminate the previously described differences in adjustment among sex-role groups.



Hypothesis 11. Construing one's sex-role in a way which is congruent with one's own self-standards of desirability results in increased psychological adjustment. This is in concert with hypothesis 10. It is based on the reasoning that it is not sex role per se which determines adjustment, but rather the ability to construe one's sex role so that it contains desirable, adaptive traits. If this is true, then individuals rating themselves high on Sex-Rep elicited traits which they have identified as highly desirable and low on Sex-Rep elicited traits which they have identified as low in desirability will do better on adjustment measures than individuals who rate themselves high on undesirable traits and low on desirable traits.

Hypothesis 12. Sex-Rep F should be more related to good adjustment than BSRI F. This hypothesis is based on Silvern and Ryan's (1979) reasoning that the inclusion of less desirable traits on the BSRI F scale has depressed the relationship between femininity and adjustment.

Hypothesis 13. Sex-typed individuals are less able than others to evaluate men along feminine dimensions and women along masculine dimensions. This hypothesis is based on Bem's (1981) reasoning that sex-typed individuals find masculine schema irrelevant when applied to women and feminine schema irrelevant when applied to men. The Sex-Rep provides a good test of this hypothesis since extremity scores have been shown to be an index of a construct's meaningfulness (Landfield, 1971).

If Bem is correct, then sex-typed individuals will show a decrease in construct meaningfulness, i.e., extremity, when applying masculine constructs to women and feminine constructs to men. Other sex-role groups should not.

Hypothesis 14. Exploratory analyses will be used to determine what relationship, if any, exists between sex-role classification and two measures of cognitive differentiation, Functionally Independent Construction (FIC) and Ordination (ORD). FIC assesses between-construct differentiation while ORD assesses within-construct differentiation (Landfield, 1976).

### Method

#### Subjects

Subjects were 100 male and 108 female undergraduates. Individuals received extra credit in introductory psychology courses for their participation in the study. The sample was composed of 77 percent Caucasian, nine percent Black, four percent Mexican American, and ten percent other individuals. Subjects ranged in age from 17 to 38 with a mean age of 21. Treatment of participants was in accordance with the ethical guidelines of the American Psychological Association.

#### Apparatus

Instruments included a version of Kelly's (1955) Role Construct Repertory Test as modified by Landfield (1971) and Doster (1983). The present author further modified the test so that it would yield a sex-role classification (Sex-Rep).

Subjects made comparisons among persons who fit the following role descriptions: Three people whom you consider very feminine, three people whom you consider very masculine, self, mother, father, boyfriend or girlfriend, happiest person you know personally, and the most unsuccessful person you know personally. Subjects were instructed to describe a feminine way in which two of the designated feminine people were alike and yet different from a third person. They were instructed to do this by using their own idea of what feminine means. These comparisons were designed to elicit a set of six feminine constructs, which would later be used by the subject to rate himself/herself and significant others. Similarly, a set of six masculine constructs was elicited. With respect to the reliability of constructs elicited by grid methods, Hunt (1951) elicited constructs to fit 41 role titles and found that on retest after a one week interval, 70 percent of the constructs elicited on the first occasion were repeated on the second. Likewise, Fjeld and Landfield (1961) found a correlation of .80 between first and second sets of elicited constructs.

Other measures used were the Bem Sex Role Inventory (BSRI; Bem, 1974), the Texas Social Behavior Inventory (TSBI; Spence & Stapp, 1974), which is designed to tap social self-esteem, the Beck Depression Inventory (BDI; Beck, 1967), and a self-concept thermometer (Therm). The latter instrument

was a simple drawing of a thermometer labeled "Self-Confidence" and marked off by tens to one hundred.

Bem reported test-retest reliabilities for the BSRI as follows: masculinity = .90; femininity = .90; androgyny = .93. She also reported the following validity data: males scored significantly higher ( $\bar{X} = 4.97$ ) than females ( $\bar{X} = 4.57$ ) on the masculinity scale ( $p < .001$ ), while females scored significantly higher on the femininity scales ( $\bar{X} = 5.01$ ) than males ( $\bar{X} = 4.44$ ,  $p < .001$ ) (Bem, 1974). The short form of the TSBI, which is used in the present study, correlates .97 for males and .97 for females with the original 32-item scale. The TSBI has been shown to be effective in predicting interpersonal attraction in laboratory studies. Factor analysis of the original TSBI yields four correlated factors: for males--confidence, dominance, social competence, and social withdrawal; for females--confidence, dominance, social competence, and relations to authority figures. It yields correlations of .81 and .83 with the PAQ's masculinity subscale for males and females respectively, and correlations of .42 and .44 with the femininity subscale (Helmreich & Stapp, 1974). Beck (1967) reported that the split-half reliability of the BDI was .93, and that BDI scores correlated .61 with clinical ratings of the depth of depression ( $p < .001$ ).

#### Procedure

Participants completed all measures in a single session lasting approximately one and one half hours. Instruments

were administered in the following order: the Therm (Appendix C), the BSRI (Appendix E), the TSBI (Appendix F), the BDI (Appendix D), and the Sex-Rep (Appendix G). Students were told that the study was investigating the relationship among a number of diverse personality variables. They were informed that their responses would remain anonymous. All subjects signed informed consent forms (Appendix A) and completed a Demographic Sheet (Appendix B) which included personal information, e.g., sex, marital status, educational level, etc.

### Results

#### Relationship of the BSRI to the Sex-Rep

Note that all relationships described in the remainder of this paper refer to findings which were significant at the .05 level or better unless otherwise stated. Separate one-way ANOVAs for males and females revealed no differences between racial groups on BSRI M and F scores or on Sex-Rep M and F scores. Bartlett's test for homogeneity of variance also showed no differences between groups. Therefore, all racial groups were pooled in subsequent analyses.

In order to test hypothesis one, subjects were classified into the following sex-role groups based on the BSRI as well as the Sex-Rep: masculine, feminine, androgynous, and undifferentiated. A 4(BSRI sex-role classification) X 4(Sex-Rep sex-role classification)  $\chi^2$  for both sexes combined indicated no overlap between BSRI and Sex-Rep sex-role classification. For males, Sex-Rep and BSRI M scores were correlated,  $r(100) = .35$ ,

$p < .0003$ ; whereas Sex-Rep and BSRI F were not related. For females, BSRI and Sex-Rep sex-role scale scores were not related.

When testing hypotheses two and three, point-biserial correlations showed significant relationships between each of the four sex-role scales, Sex-Rep M, Sex-Rep F, BSRI M, BSRI F, and sex. In order,  $r_{pbis}(208) = -.31$ ,  $p < .0001$ ;  $r_{pbis}(208) = .31$ ,  $p < .001$ ;  $r_{pbis}(207) = -.25$ ,  $p < .002$ ;  $r_{pbis}(207) = .24$ ,  $p < .004$ . Fisher's  $r$  to  $z$  transformations revealed no significant differences between correlations.

A stepwise discriminant analysis using Sex-Rep M and F as well as BSRI F and M to predict sex, selected all four of the scales, in the order mentioned as discriminating between the sexes. Table 1 summarizes that analysis.

When testing hypothesis four, separate  $2 \times 4 \chi^2$ s for related groups found no difference in the frequency of people classified into the four sex-role groups by the BSRI and the Sex-Rep.

Separate paired-comparisons  $t$ -tests for males and females were used to test hypothesis five. For males, there were no desirability differences between Sex-Rep masculine traits and Sex-Rep feminine traits. Females rated Sex-Rep feminine traits as more desirable than Sex-Rep Masculine traits. The mean difference in desirability of masculine and feminine traits was 8.70 with a standard error of the mean of 1.50 and  $t = 5.80$ ,  $p < .0001$ .

Table 1  
 Stepwise Discriminant Analysis of Sex-Role Scales on Sex

Step	Variable Entered	Number in	Partial R**2	F Statistic	Prob > F	Wilks' Lambda	Prob > Lambda
1	Sex-Rep Masculinity	1	0.0948	21.472	0.0001	0.90518955	0.0001
2	Sex-Rep Femininity	2	0.0921	20.704	0.0001	0.82178517	0.0001
3	BSRI Femininity	3	0.0279	5.823	0.0167	0.79886901	0.0001
4	BSRI Masculinity	4	0.0263	5.461	0.0204	0.77784038	0.0001

### The Relationship of Sex-Role to Adjustment

To test hypothesis seven, a stepwise discriminant analysis, using social self-esteem, the self-esteem thermometer, and BSRI M and F to predict sex was employed. BSRI M, BSRI F, and social self-esteem were entered, in that order, as discriminating between the sexes. Since social self-esteem was not related to sex,  $r_{pbis}(208) = .03$ , but positively related to BSRI M for both males and females,  $r(100) = .52$ ,  $p < .0001$ ;  $r(107) = .46$ ,  $p < .0001$ ; respectively; it appears that social self-esteem increases the predictive validity of the BSRI M and F scales by having its effects subtracted out of the M scale. A stepwise multiple regression analysis, using BSRI M, BSRI F, and social self-esteem to predict sex, confirmed that the estimated regression coefficients for BSRI M and social self-esteem were in opposite directions. Table 2 summarizes that multiple regression analysis. Table 3 summarizes the discriminant analysis using the BSRI sex-role scales and the two self-esteem measures to predict sex.

A stepwise discriminant analysis, using the Sex-Rep sex-role scales along with the two self-esteem measures to predict sex, selected only Sex-Rep M and F as contributing to the discrimination between males and females. Table 4 summarizes this analysis.

In order to test hypotheses eight, nine, and ten, subjects were divided at the median on BSRI M and F scores. Separate 2(high M, low M) X 2(high F, low F) ANOVAs for males and females



Table 2

Stepwise Multiple Regression of Bem Sex-Role Scales and Social Self-Esteem on Sex

	DF	Sum of Squares	Mean Square	F	Prob > F
Regression	3	8.18593368	2.72864456	12.73	0.0001
Error	203	43.50488757	0.21430979		
Total	206	51.69082126			
	B Value	Std Error	Type II SS	F	Prob > F
Intercept	1.21913946				
BSRI Masculinity	-0.01189686	0.00244381	5.07894307	23.70	0.0001
BSRI Femininity	0.00985115	0.00259783	3.08279372	14.38	0.0002
TSBI	0.01187622	0.00422367	1.69441370	7.91	0.0054

R Square = 0.15836339

Table 3

Stepwise Discriminant Analysis of BSRI Sex-Role Scales and Self-Esteem on Sex

Step	Variable Entered	Number In	Partial R**2	F Statistic	Prob > F	Wilks' Lambda	Prob > Lambda
1	BSRI Masculinity	1	0.0645	14.136	0.0002	0.9354902	0.0002
2	BSRI Femininity	2	0.0653	14.248	0.0002	0.8744163	0.0001
3	TSBI	3	0.0375	7.906	0.0054	0.8416366	0.0001

Table 4

Stepwise Discriminant Analysis of Sex-Rep Sex-Role Scales and Self-Esteem on Sex

Step	Variable Entered	Number In	Partial R**2	F Statistic	Prob > F	Wilks' Lambda	Prob > Lambda
1	Sex-Rep Masculinity	1	0.0986	22.525	0.0001	0.9014333	0.0001
2	Sex-Rep Femininity	2	0.0923	20.836	0.0001	0.8182666	0.0001

were computed on adjustment measures. For males there were main effects of masculinity on TSBI,  $F(3, 99) = 8.83, p < .001$ ; Therm,  $F(3, 99) = 9.09, p < .001$ ; and Beck,  $F(3, 99) = 3.70, p < .01$ . Duncan's multiple range tests revealed that in every case, high M was related to increased adjustment. For males, there were no main effects of F, or interactions. For females there were no main effects of F, or interactions. However, there were main effects of M on TSBI,  $F(3, 106) = 5.86, p < .001$ . Duncan's multiple range test revealed that those women scoring above the median on M also scored higher on social self-esteem.

Subjects were also divided at the median on Sex-Rep M and F. Separate 2(high M, low M) X 2(high F, low F) ANOVAs for males and females were computed on the adjustment variables. For both sexes, there were no significant main effects or interactions on any of the dependent variables.

In order to test hypothesis 11, subjects were divided at the median, based on their desirability ratings of Sex-Rep elicited masculine and feminine traits. Those individuals who scored above the median on the sex-role scales they rated high in desirability, and low on the scales they rated low in desirability, were assigned to a group called "congruent." Individuals who scored low on the scales they rated as highly desirable, and high on the scales they rated as low in desirability, were assigned to a group called "incongruent." Separate  $t$ -tests for males and females were computed, comparing

the congruent group to the incongruent group on the various adjustment variables. For males, there were no differences between groups on any of the dependent variables. For females, the congruent group scored higher on TSBI,  $t(106) = 2.37$ ,  $p < .02$ ; and lower on depression,  $t(106) = 2.37$ ,  $p < .02$ ; than the incongruent group.

In order to test hypothesis 12, correlations were computed between BSRI and Sex-Rep sex-role scales and the various adjustment measures. Neither Sex-Rep F nor BSRI F was related to any of the dependent variables for either sex. BSRI M was related to TSBI,  $r(100) = .52$ ,  $p < .0001$ ; Therm,  $r(100) = .50$ ,  $p < .0001$ ; and BDI,  $r(100) = -.38$ ,  $p < .0001$ ; for males. For females, BSRI M was related to TSBI,  $r(107) = .46$ ,  $p < .0001$ ; and Therm,  $r(107) = .26$ ,  $p < .005$ . Sex-Rep M was not related to any of the dependent variables for females. For males, Sex-Rep M was related to TSBI,  $r(100) = .35$ ,  $p < .0003$ ; Therm,  $r(100) = .28$ ,  $p < .004$ ; and BDI,  $r(100) = -.24$ ,  $p < .015$ .

#### The Relationship of Sex-Role to Cognitive Variables

To test hypothesis 13, construct extremity scores were calculated under sex-consistent and sex-inconsistent conditions. When a subject rated a male significant other on a masculine construct or a female on a feminine construct, that constituted a sex-consistent condition. When a subject rated a female on a masculine construct or a male on a feminine construct, that constituted a sex-inconsistent condition. Separate one-way ANOVAs for males and females showed effects of sex-consistency

on extremity scores,  $F(1, 2364) = 191.76$ ,  $p < .0001$ ; and  $F(1, 2556) = 217.37$ ,  $p < .001$ , respectively. Construct extremity scores were lower under sex-inconsistent conditions than sex-consistent conditions.

Separate 2(sex-consistency) X 4(Sex-Rep sex-role classification) ANOVAs for males and females were then computed on extremity scores. For females there were no significant interactions. Females showed main effects of both sex-consistency and sex-role classification on extremity scores. Duncan's multiple range tests revealed that extremity scores were lower under sex-inconsistent conditions, and that the sex-typed and androgynous groups scored higher on extremity than the cross-sex-typed and undifferentiated groups. The cross-sex-typed group also scored higher on extremity than the undifferentiated group. Table 5 summarizes this analysis, while Figure 1 (Appendix J) illustrates the relationships between the independent variables and extremity scores.

For males, there were effects for sex-consistency and sex-role classification. Duncan's multiple range tests indicated that extremity scores were lower under sex-inconsistent conditions, and that the androgynous group scored significantly higher than the cross-sex-typed and undifferentiated groups. The sex-typed group did not differ from the androgynous group or the cross-sex typed group, but was higher than the undifferentiated group. The cross-sex-typed group was also higher than the undifferentiated group. Table 6 and Figure 2 (Appendix K) summarize this analysis.

Table 5

Sex-Rep Sex-Role Classification by Sex-Consistency on Extremity Scores  
 Analysis of Variance Table for Females

Dependent Variable: Extremity Scores					
Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Model	7	11345.72131371	1620.81733053	39.86	0.0001
Error	2478	100751.70426956	40.65847630		Root MSE
Corrected Total	2485	112097.42558327			6.376399995
Source	DF	SS	F Value	PR > F	
Sex-Consistency	1	8908.46178600	219.20	0.0001	
Sex-Rep Classification	3	2346.55159452	19.24	0.0001	
Sex-Consistency* Sex-Rep Classification	3	90.70793319	0.74	0.5293	

Table 6

Sex-Rep Sex-Role Classification by Sex-Consistency on Extremity Scores  
 Analysis of Variance Table for Males

Dependent Variable: Extremity Scores					
Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Model	7	11230.40188102	1604.34312586	36.71	0.0001
Error	2238	97798.07941907	43.69887374		Root MSE
Corrected Total	2245	109028.48120009			6.61051237
Source	DF	SS	F Value	PR > F	
Sex Consistency	1	8483.18121104	194.13	0.0001	
Sex-Rep Classification	3	2429.93619011	18.54	0.0001	
Sex-Consistency* Sex-Rep Classification	3	317.28447987	2.42	0.0632	



Separate 2 (sex-consistency condition) X 4 (BSRI sex-role classification) ANOVAs for males and females were computed on extremity scores. For females there were main effects for sex-consistency and sex-role classification, as well as an interaction between them. Separate correlations between sex-consistency and extremity scores were run for each sex-role group, in order to determine which of the groups decreased in meaningfulness more than the others. Fisher's  $r$  to  $z$  transformations were used to calculate the significance of differences between correlations. The pattern of transformations revealed that the sex-typed and undifferentiated groups showed greater decreases in meaningfulness than the androgynous and cross-sex-typed groups. Table 7 summarizes the ANOVA, while Table 8 summarizes the correlations. Figure 3 (Appendix L) illustrates the interaction between sex-consistency and BSRI sex-role classification on meaningfulness.

For males, there were also main effects of sex-consistency and BSRI sex-role classification on extremity scores, as well as an interaction between them. Again, separate correlations for each sex-role group were computed between sex-consistency and extremity. Fisher's  $r$  to  $z$  transformations revealed that the undifferentiated and cross-sex-typed groups showed greater decreases in meaningfulness than the androgynous and sex-typed groups. Table 9 summarizes the ANOVA while Table 8 summarizes the correlations. Figure 4 (Appendix M) illustrates the interaction between sex-consistency and BSRI sex-role classification for males on extremity scores.

Table 7

BSRI Sex-Role Classification by Sex-Consistency on Extremity Scores  
 Analysis of Variance Table for Females

Dependent Variable: Extremity Scores		DF	Sum of Squares	Mean Square	F Value	PR > F
Model	7	11670.11556012	1670.11556012	41.26	0.0001	
Error	2528	102136.81819383	40.40222239	Root MSE		
Corrected Total	2535	113806.93375394	6.35627425			
Source	DF	SS	F Value	PR > F		
Sex-Consistency	1	8987.01735016	222.44	0.0001		
BSRI Classification	3	2150.74499479	17.74	0.0001		
Sex-Consistency*						
BSRI Classification	3	532.35321517	4.39	0.0045		

Table 8  
Correlations Between Extremity Scores and Sex-Consistency  
of Construct for BSRI Sex-Role Groups

Correlation Coefficients	Level of Significance	Sex-Role Group
<u>Males</u>		
1. .21	$\underline{p} < .0001$	Androgynous
2. .21	$\underline{p} < .0001$	Sex-Typed
3. .40	$\underline{p} < .0001$	Cross-Sex-Typed
4. .40	$\underline{p} < .0001$	Undifferentiated
<u>Females</u>		
1. .23	$\underline{p} < .0001$	Androgynous
2. .34	$\underline{p} < .0001$	Sex-Typed
3. .15	$\underline{p} < .0169$	Cross-Sex-Typed
4. .31	$\underline{p} < .0001$	Undifferentiated

Differences Among BSRI Sex-Role Groups for Correlations  
Between Extremity Scores and Sex-Consistency of Constructs

Critical Ratio	Level of Significance	Sex-Role Groups Compared
1. -.38	not significant	Androgynous/Sex-Typed
2. -3.36	$\underline{p} < .001$	Androgynous/ Undifferentiated
3. -2.89	$\underline{p} < .002$	Androgynous/ Cross-Sex-Typed
4. -3.25	$\underline{p} < .001$	Sex-Typed/ Undifferentiated

Males

Critical Ratio	Level of Significance	Sex-Role Groups Compared
5. -2.74	$\underline{p} < .003$	Sex-Typed/ Cross-Sex-Typed
6. 0	not significant	Undifferentiated/ Cross-Sex-Typed

Females

1. -2.31	$\underline{p} < .01$	Androgynous/ Sex-Typed
2. -1.68	$\underline{p} < .047$	Androgynous/ Undifferentiated
3. 1.12	not significant	Androgynous/ Cross-Sex-Typed
4. .67	not significant	Sex-Typed/ Undifferentiated
5. 2.78	$\underline{p} < .002$	Sex-Typed/ Cross-Sex-Typed
6. 2.32	$\underline{p} < .01$	Undifferentiated/ Cross-Sex-Typed

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Table 9

BSRI Sex-Role Classification By Sex-Consistency on Extremity Scores  
 Analysis of Variance Table for Males

Dependent Variable: Extremity Scores					
Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Model	7	15130.71763802	2161.53109115	50.27	0.0001
Error	2358	101385.25531210	42.99629148		Root MSE
Corrected Total	2365	116515.97295013			6.55715575
Source	DF	SS	F Value	PR > F	
Sex-Consistency	1	8742.30938292	203.33	0.0001	
BSRI Classification	3	5618.07669827	43.55	0.0001	
Sex-Consistency*					
BSRI Classification	3	770.33155683	5.97	0.0006	

A multiple regression procedure showed that TSBI scores and sex-consistency condition, as well as an interaction between them, were related to extremity scores in both sexes. Tables 10 and 11 summarize those analyses.

To test hypothesis 14, subjects were divided at the median on FIC and ORD. Separate 2 (high FIC, low FIC) X 2 (high ORD, low ORD) ANOVAs for males and females were computed on Sex-Rep M and F as well as on BSRI M and F. There were no significant effects on any of the dependent measures.

Separate one-way ANOVAs for BSRI and Sex-Rep sex-role classification were computed for males and females on FIC and ORD. For both sexes there were no effects of BSRI sex-role classification. For males there were no significant effects of Sex-Rep classification. For females, however, Sex-Rep classification was related to ORD,  $F(3, 100) = 2.80$ ,  $p < .04$ . Duncan's multiple range test showed that the androgynous group scored higher than the sex-typed group. There were no significant differences among other groups.

### Discussion

#### Relationship of the Bem Sex Role Inventory (BSRI) to the Sex-Rep

Results generally failed to support hypothesis one, Bem's (1981) notion that masculinity and femininity, as measured by the BSRI, are related to an individual's idiosyncratic interpretation of sex-role attributes. There was no significant overlap between BSRI and Sex-Rep sex-role

Table 10 :

Multiple Regression of Sex-Consistency and Self-Esteem  
on Extremity Scores for Males

Dependent Variable:	Extremity Scores	T for HO:		
Parameter	Estimate	Parameter = 0	PR > !T!	STD Error of Estimate
Intercept	7.12889858	3.58	0.0004	1.99159273
Sex-Consistency	6.938884213	5.51	0.0001	1.25959384
TSBI	0.21538472	4.76	0.0001	0.04529219
Sex-Consistency *TSBI	-0.07209978	-2.52	0.0119	0.02864530

Table 11  
 Multiple Regression of Sex-Consistency and Self-Esteem  
 on Extremity Scores of Females

Dependent Variable: Extremity Scores	Estimate	T for H <sub>0</sub> : Parameter = 0	PR >  T	STD Error of Estimate
Intercept	10.60829780	4.58	0.0001	2.31579330
Sex-Consistency	7.16066543	4.89	0.0001	1.46463628
TSBI	0.15546082	2.97	0.0030	0.05234172
Sex-Consistency *TSBI	-0.07827764	-2.36	0.0181	0.03310381



classification. Although males did show a correlation between their self-ratings on the BSRI and Sex-Rep M scales, no other relationships between the subscales of the two instruments were found.

The BSRI M and F scales were derived from the common meanings ascribed to masculinity and femininity in the early 1970s, whereas the Sex-Rep ideographically elicits personal sex-role constructs. The present findings indicate only a small affinity between male-female stereotypes and the male-female percepts which individuals use to organize information about significant others. Only men's personal definitions of masculinity appear to be similar to cultural stereotypes of masculinity. This may reflect the tremendous upheaval today's women are experiencing. The rapidly changing role of women in society may have forced both men and women to discard their old feminine constructs, since these have probably become poor predictors of behavior.

Hypothesis two, that the Sex-Rep is a valid sex-role instrument was supported. Correlational analysis of the Sex-Rep demonstrated that men scored significantly higher on M and lower on F than did women. Spence et al. (1979) have stated that the ultimate justification for calling an instrument a measure of sex-role, and for labeling scales "masculine" and "feminine" lies in the ability of the scales to discriminate between the sexes.

Hypothesis three, that the Sex-Rep is a better index of masculinity and femininity than the BSRI received weak support.

Both BSRI and Sex-Rep M and F were related to sex. Although each of the Sex-Rep scales showed slightly higher correlations with sex than either of the BSRI scales, the differences between correlations were not significant. A stepwise discriminant analysis selected each of the Sex-Rep scales to predict sex before entering either of the BSRI scales. Table 1 summarizes that analysis.

The above findings, coupled with the small degree of overlap between the BSRI and Sex-Rep, indicate that each of these instruments tap some component of sex-role, yet they are nonredundant. Since they measure different aspects of sex-role, the question of which is the better instrument becomes mute. The BSRI apparently measures the dominance-poise or instrumental component of masculinity, and the nurturance-warmth or expressive component of femininity (Lubinski et al., 1983; Spence, 1983).

The Sex-Rep assesses an individual's identification with personal definitions of masculinity and femininity. Its M and F scales are not tied to any one culture or era, making the Sex-Rep a contextually sensitive instrument. M and F scores on the Sex-Rep probably reflect a more global indication of the extent to which people view themselves as masculine and feminine. M and F constructs cannot be defined as clearly as BSRI traits, e.g., as instrumental or expressive in nature, since they vary from person to person and are even free to vary for the same individual across administrations.

Some may view this as problematic, but it is also the strength of the Sex-Rep. Kelly (1955) defined the personal construct system as a process of viewing the world, and developed the repertory grid technique to tap that dynamic process. It may be advantageous in this day and age to have a sex-role inventory that can accommodate rapidly changing conceptions of masculinity and femininity.

Hypothesis four, that fewer people would be classified as androgynous by the Sex-Rep than by the BSRI, was not supported. Locksley and Colten (1979) suggested that the BSRI tended to blur the differences between the sexes by failing to include the most salient traits for sex differentiation, and by failing to provide a comparative context which would clarify the meaning to the traits. This blurring of sex differences supposedly resulted in the classification of a spuriously large number of individuals as androgynous, since the lack of context for the traits might allow individuals to interpret them very broadly, in order to make them personally relevant. The Sex-Rep was intended to rectify these problems. Salient trait descriptors were insured by eliciting them from subjects individually. Furthermore, the traits were elicited in a standard context, i.e., how two acquaintances were alike and different from a third, and self-ratings were obtained in the context of ratings for significant others. Under these circumstances, the meaning of descriptors should have been quite clear to each subject.

Nonetheless, the Sex-Rep and the BSRI did not differ in percentage of individuals classified as androgynous. The Sex-Rep identified 22.11 percent of subjects sampled as androgynous, 39.20 percent as sex-typed, 25.13 percent as undifferentiated, and 13.57 percent as cross-sex-typed. The BSRI identified 25.63 percent of subjects sampled as androgynous, 35.18 percent as sex-typed, 27.14 percent as undifferentiated, and 12.06 percent as cross-sex-typed. Since these were different individuals, however, it is not clear whether this reflects a consistent trend in the population, or is merely the result of the median-split methodology. The M and F scales of the BSRI are independent, as are the M and F scales of the Sex-Rep. Therefore classifying subjects into sex-role groups based on median splits of M and F scores may have led to similar numbers of individuals being assigned to the various sex-role groups.

Hypothesis five, that masculinity would be considered more desirable than femininity, regardless of whether they were defined by stereotypes or by personal constructs was not supported. This weakens Taylor and Hall's (1982) contention that masculinity is in reality more desirable than femininity in our society. It also weakens their contention that results obtained from sex-role inventories whose M scales contain traits which are more socially desirable than F traits accurately reflect the current social reality.

Hypothesis six, that the use of personally irrelevant stereotypes has inflated the desirability of masculinity, and that defining masculinity and femininity via personal constructs would result in each sex choosing their sex-congruent constructs as more desirable than their sex-incongruent constructs, was supported. Subjects were asked to use themselves as a referent, and to rate the desirability of each pole of their masculine and feminine constructs. Men rated masculine poles as more desirable than feminine poles, although the difference was not significant. Women rated feminine poles as significantly more desirable than masculine poles. This is in direct contrast to Pedhauzer and Tetenbaum's (1979) finding that regardless of the sex of the referent, both males and females rated BSRI masculine traits as very desirable and BSRI feminine traits as only somewhat desirable. Thus at the level of personal constructs, rather than social stereotypes, masculinity does not reign supreme.

#### The Relationship of Sex-Role to Adjustment

Hypothesis seven, that the BSRI is confounded with self-esteem, resulting in an inflated relationship between masculinity and adjustment was supported. Correlations showed that self-esteem, as measured by the TSBI, was strongly related to BSRI M; and yet it was unrelated to the sex-role validity criterion, gender. This is a classic example of a suppressor variable pattern. Since suppressant variables are, in practice, difficult to detect (McNemar, 1969; Wiggins, 1973), this

concept may be unfamiliar to many, and bears elucidation.

An interesting paradox of multiple correlation is that it is possible to increase prediction by utilizing a variable which shows no, or low, correlation with the criterion, provided it correlates well with a variable which does correlate with the criterion. . . Such a variable has been termed a "suppressant." We do not quickly see just how a suppressant variable, showing no correlation with the criterion, can increase the accuracy of prediction. Perhaps this point can be explained by reasoning by way of the notion that correlation can be thought of in terms of common elements. . . For illustrative purposes, all the elements of X3 are contained in X2; these elements are not related to X1 and hence their presence in X2 must tend to lower the correlation between X1 and X2; if these elements could be suppressed, the correlation between X1 and X2 minus the irrelevant. . . elements of X2 should be higher. . . (McNemar, 1969, pp. 210-211).

In a prediction equation, a suppressant variable is one whose only contribution to prediction lies in its correlation with noncriterion components of one or more "valid" variables. A "pure" suppressant variable would correlate zero with the criterion variable, but would show substantial positive or negative correlations with one or more of the other variables in the prediction equation. If this correlation with the

valid predictors were positive, then the regression coefficient for the suppressant variable would usually be negative (Williams, 1984).

A stepwise discriminant analysis confirmed that social self-esteem indeed acts as a suppressant in the relationship between the BSRI sex-role scales and sex. As can be seen in Tables 2 and 3, BSRI M and F discriminate between the sexes significantly better when TSBI scores are taken into account. Since TSBI correlates around zero with sex,  $r_{pbis} = .03$ , it adds to predictive validity by being subtracted out of the equation. A stepwise multiple regression analysis, in Table 2, shows that the estimated regression coefficients for the BSRI M scale and TSBI are in opposite directions. Thus, the self-esteem component of M is being removed in order to enhance the relationship between BSRI M and F and sex. Thus the BSRI appears to be confounded with self-esteem. In other words, the self-esteem component of M interferes with the ability of M to function as masculinity, i.e., to discriminate gender. Therefore, one must question whether the numerous reports of a positive relationship across sexes between the M scale and adjustment reflect a true relationship between masculinity and mental health, or artifacts produced by an M scale confounded with self esteem.

Although one would not expect the Sex-Rep to be confounded with self-esteem, a parallel discriminant analysis was run using its scales along with the TSBI to predict sex. This

check confirmed that TSBI scores did not affect the predictive validity of the Sex-Rep. Table 4 summarizes this analysis.

There was no support for hypothesis eight, that undifferentiated individuals are better adjusted than those in other sex-role groups, regardless of whether they were classified by the BSRI or by the Sex-Rep. Although Bem (1981) maintained that it is healthier to completely eliminate the connection between personality attributes and sex, so far there is no evidence that those who have begun to do so, i.e., the undifferentiated group, are better off for it.

There was no support from either the BSRI or the Sex-Rep for hypothesis nine, that androgynous individuals are better adjusted than those in other sex-role groups. Separate ANOVAs for males and females revealed that when the Sex-Rep was used to classify individuals into groups, there were no effects on any of the adjustment measures. As might be expected, when the BSRI was used to classify individuals, masculinity was positively related to adjustment as measured by the TSBI, Therm, and Beck for men; and the TSBI for women. In every case, scoring above the median on M was associated with better adjustment. There were no significant interactions between M and F scores on any of the adjustment measures. Thus, as Locksley and Colten (1979) maintained earlier, it appears to be BSRI masculinity rather than androgyny which predicts adjustment for both sexes. However, as explained above, this relationship between the M scale and adjustment may be an artifact of the BSRI rather than a true sex-role effect.



Hypothesis ten, that individuals can actively construe any sex role in an adaptive way, was supported. It was predicted that if people do construe various sex-roles adaptively, then using their own personal constructs to classify them into sex-role groups would decrease the difference in adjustment between groups. In fact, as noted above, when subjects were classified according to the Sex-Rep, the relationship between sex-role classification and the adjustment measures dropped out. This was true for both sexes. Nevertheless, when the Sex-Rep M and F scales were correlated as continuous measures with the adjustment variables, males did show significant positive correlations between masculinity and the two self-esteem indices, as well as a significant negative correlation between masculinity and depression. No other M or F scale correlations reached significance. On the whole, results indicated that although there is some positive relationship between masculinity and adjustment for men, the sex-role classification group an individual falls into is not a determining factor in adjustment.

Hypothesis 11, that construing one's sex-role in a way which is congruent with one's own self-standards results in increased psychological adjustment, was supported for females but not for males. Women whose sex-role classification was congruent with their statements about the desirability of masculine and feminine personality traits scored significantly higher on self-esteem and lower on depression than the incongruent group. For women, what seems to determine adjustment

is not sex role per se, but rather the ability to define their own sex-role identity in a positive way. Since there are a number of mutually exclusive views today about what constitutes appropriate sex-role attitudes and behavior for females, women may be forced, more than men, to rely on their own judgment about what is right for them.

Hypothesis 12, that Sex-Rep F would be more related to adjustment than BSRI F was not supported. Neither the Sex-Rep or the BSRI produced significant correlations between F and the adjustment measures. If the inclusion of undesirable items on the BSRI F scale has depressed the relationship between femininity and adjustment, it is not apparent from the present findings. However, an earlier study in which the Sex-Rep and the BSRI were given to breastfeeding mothers found that Sex-Rep F was significantly related to high self-esteem and low anxiety, whereas BSRI F was not (Baldwin, Stevens, Critelli, and Russell, 1984). This may have occurred because femininity is more adaptive in the context of new motherhood than in that of academia.

#### The Relationship of Sex-Role to Cognitive Variables

Hypothesis 13, based on Bem's (1981) view that sex-typed individuals are less able than other sex-role groups to evaluate men along feminine dimensions and women along masculine dimensions, was not supported. Construct extremity scores, which have been shown to be an index of a construct's meaningfulness (Landfield, 1976), were calculated under sex-consistent and sex-inconsistent conditions. When a subject

rated a male on a masculine construct or a female on a feminine construct, that constituted a sex-consistent condition. When a subject rated a male on a feminine construct or a female on a masculine construct, that constituted a sex-inconsistent condition. Both sexes had lower extremity scores for the sex-inconsistent condition. In other words, masculine constructs were not as meaningful when applied to females as to males, while feminine constructs were not as meaningful when applied to males as to females. Contrary to gender schema theory, results indicated that when sex-role classification is determined via the Sex-Rep there is no significant interaction between sex-role classification and sex-consistency of constructs on meaningfulness. This is true for both sexes. Also, contrary to gender schema theory's tenent that sex-typed individuals place more importance on gender schema than do androgynous individuals, results indicated that gender construct extremity scores were equally high for androgynous and sex-typed women and men. That is, androgynous and sex-typed subjects found their gender constructs equally meaningful.

Hypothesis 13 was also not supported when the BSRI was used to classify individuals into sex-role groups. For females, there were main effects of sex-consistency and BSRI sex-role classification on extremity scores. There was also an interaction between them. As can be seen in Figure 3 (Appendix L), the sex-typed and undifferentiated groups showed larger decreases in meaningfulness on sex-inconsistent constructs than the other groups did. The large decrease by the sex-typed group fits Bem's rationale. However, her reasoning does not

explain the equally large decrease by the undifferentiated group. An explanation which can account for the decreases by both groups becomes apparent when the results for BSRI classified males and females are examined side by side.

Males showed main effects for sex-consistency and sex-role classification as well as an interaction between them. As can be seen in Figure 4, the cross-sex-typed group and the undifferentiated group showed larger decreases in meaningfulness than the other groups. This finding is contrary to gender schema theory's proposals about the cognitive processing of sex-role groups. It would have predicted a large decrease in meaningfulness from the sex-typed group alone. Careful examination of results from both BSRI classified males and females reveals that in every case, it is the groups scoring below the median on M that show the largest decreases in meaningfulness. Since there is a very strong relationship between BSRI M and self-esteem, it is possible that this is a self-esteem effect rather than a true sex-role effect.

Following up on that hypothesis, separate multiple regressions for males and females were run, using TSBI and sex-consistency to predict extremity scores. In fact there was a significant interaction between sex-consistency and self-esteem on extremity scores for both sexes. Table 11 shows that while sex-consistency and self-esteem are both positively related to extremity scores, they show a negative regression estimate when they interact with one another.

This confirms that the interaction between self-esteem and sex-consistency is in the appropriate direction to support the hypothesis that individuals who are high in self-esteem will evidence higher scores under sex-inconsistent conditions than those who are low in self-esteem. Thus the interactions shown in Figures 3 (Appendix L) and 4 (Appendix M) may very well reflect self-esteem effects.

Low self-esteem is one indicator of poor adjustment. Personal Construct Psychology (Kelly, 1955) postulates that poor adjustment is characterized by the use of preemptive impermeable constructs. If individuals who are low in self-esteem tend to use such constructs, then they can be expected to have difficulty applying them outside of their original contexts. Thus it is reasonable to predict a larger decrease in construct meaningfulness under sex-inconsistent conditions by low self-esteem groups.

Exploratory analyses were used to determine what relationship, if any, exists between sex-role and cognitive organization. Two measures of cognitive organization were used, Functionally Independent Construction (FIC) and Ordination (ORD). Landfield (1976) described these as follows. FIC refers to a "complexity" score which indicates the number of orthogonal constructs found in the sample constructs elicited by a Rep grid. High FIC scores imply a high degree of differentiation between constructs in a system. Because FIC has been used as a measure of cognitive complexity, it is often assumed that high FIC is

better than low FIC. However, Bannister (1965) has shown that very high FIC scores are associated with schizophrenia, and others have postulated a curvilinear relationship between FIC and optimal cognitive functioning (Adams-Webber, 1970).

Landfield (1976) developed ORD as a measure of hierarchical organization or integration. It is considered a measure of within construct differentiation. ORD is based on the number of different levels of extremity, i.e., meaningfulness, a person employs when rating his acquaintances on a construct. It assumes that ordering acquaintances within a construct or ordering constructs in relation to an acquaintance using different levels of meaningfulness, i.e., employing a multi-level approach, implies a greater capacity to employ higher order, more abstract conceptions. The reader is referred to Landfield (1976) for detailed instructions on calculating FIC and ORD. Landfield suggested that it is more useful to consider the interaction between FIC and ORD than to consider FIC alone. He pointed out that a person may use many different kinds of dimensions (high FIC), yet fail to make discriminations within this complex system.

Subjects were divided at the median on FIC and ORD. Separate 2 (high FIC, low FIC) X 2 (high ORD, low ORD) ANOVAS for males and females were calculated on Sex-Rep M and F, as well as on BSRI M and F. There were no significant effects on any of the dependent variables. Thus neither FIC nor ORD appears to be related to masculinity or femininity per se.

Subjects were then classified into sex-role groups via the Sex-Rep and the BSRI in order to determine if various combinations of masculinity and femininity were related to FIC and ORD. The only significant sex-role effects occurred for females as classified by the Sex-Rep. Androgynous females scored significantly higher on ORD than the sex-typed females. No other groups were significantly different from one another. This finding is of particular interest since it is the only one from the present study which suggests that the androgynous group has an advantage over the sex-typed group. Following Landfield's description of ORD, these results indicate that, for sex-role classification based on personal constructs, androgynous women have a greater possibility for ordered thought, higher order conception, and effective decision making than sex-typed women.

#### Summary

Results indicated that the BSRI and the Sex-Rep are both valid sex-role instruments, insofar as they both discriminate between males and females. However, they tend to measure different components of sex-role as indicated by the lack of overlap between their sex-role classifications and their continuous subscale scores. Since these instruments measure different aspects of sex role, it is important to try and clarify what those differences are. The BSRI assesses an individual's extent of identification with certain traditional, stereotyped aspects of maleness and femaleness. Thus, its M and F scales are tied to U.S. culture at the time they were

developed. Apparently, the content of the BSRI M and F scales is limited to a dominance-poise component and a nurturance-warmth component, respectively (Lubinski et al., 1983).

The Sex-Rep elicits personal constructs of sex-role from each individual at the time of administration. Thus, its scales are more reflective of the subject's individualized interpretation of sex-role, and are more sensitive to fluctuations in attitudes about gender. Because the sex-role constructs used vary from person to person and from test to retest, the specific content of M and F cannot be explicitly described--they differ for every subject. What the Sex-Rep assesses then is an individual's extent of identification with his or her own unique definition of maleness and femaleness.

In regard to the relationship between sex-role and cognitive variables, the following interpretations were made. First, because Bem (1981) conceptualized sex-typing as the result of gender schematic processing, and gender schema as unique individual constructs, the Sex-Rep seems more appropriate for evaluating gender schema theory than the BSRI. In fact, gender schema theory received no support from the BSRI, and slight support from the Sex-Rep in this study. Contrary to Bem's gender schema theory, both androgynous and sex-typed individuals find gender constructs highly meaningful when evaluating themselves and others. This is true for both males and females, regardless of whether classification is via the



BSRI or the Sex-Rep. This indicates that the androgynous and sex-typed groups may have more in common than has been suggested by Bem. After all, both groups identify strongly with a large number of gender-related descriptions. Also contrary to gender schema theory, men and women generally find that personal masculine constructs are more relevant for men than for women, whereas personal feminine constructs are more relevant for women than for men. For both sexes, this effect is no more pronounced in one Sex-Rep classification group than another. In both sexes, this effect is more pronounced for individuals who are low in BSRI masculinity, and therefore probably low in self-esteem. The latter effect was explained as resulting from the probable use of preemptive, impermeable constructs by individuals who are low in self-esteem. Gender schema theory, on the other hand predicted that it would be more pronounced for women who scored high on BSRI femininity as well as low on BSRI masculinity, and for men who scored high on BSRI masculinity as well as low on BSRI femininity, i.e., sex-typed individuals. This was not supported.

Sex-Rep classified androgynous women scored higher on a measure of cognitive complexity, Ordinality, than did sex-typed women. This points to a higher capacity for ordered, more abstract thought in androgynous women. It supports gender schema theory in that it indicates a cognitive advantage for the androgynous group over the sex-typed group. This finding

indicates that there may still be some utility in the median-split sex-role classification methodology. Nevertheless, the general pattern of results from the present study failed to support the notion that BSRI sex-role classifications are useful for investigating gender schematic processing, and it did not support gender schema theory's proposal that sex-typed individuals rely more heavily on gender schematic processing than others do.

In regard to the relationship between sex-role classification and adjustment, the Sex-Rep provided evidence that individuals in any sex-role group can construe their gender identity in an adaptive way. No one sex-role group did better than any other on adjustment measures. This was true for both sexes, also females whose sex-role classification fit their self-standards of desirability were more well adjusted than other females. Since there are no longer any hard and fast definitions of masculinity and femininity in our society, individuals have considerable freedom to construe them in a way which suits their own personality and life-style. This is particularly true for concepts of femininity, which seem to be in a state of particular flux in today's society. Thus women may be especially able to reconstrue stereotypical femininity in a healthier way. Allowing women to actively describe their own idea of what feminine means, results in the identification of feminine traits which are more desirable for the individual woman than are masculine traits. This is

an important finding, since the literature to date has tended to assume that both men and women value masculinity more than femininity (Taylor & Hall, 1982). Perhaps femininity is positively related to adjustment in some situations, and unrelated or negatively related in others. The Sex-Rep allows a healthy conception of femininity to be identified where it does exist (Baldwin, Stevens, Critelli, & Russell, 1984), whereas the BSRI is limited to one construal of femininity-- which has so far been inconsistently related to adjustment (Taylor & Hall, 1982; Lubinski et al., 1983).

The present study did not find any support for the concept of androgyny as an interactive entity which is related to positive adjustment. Like other recent studies (Taylor & Hall, 1982; Lubinski et al., 1983), present findings showed that BSRI M was strongly related to adjustment, whereas BSRI F had little impact. Findings such as these have led Lubinski et al. (1983) to recommend that therapists attempt to increase masculine traits, represented by dominance-poise, in both sexes. These kinds of programs may begin to replace old ones aimed at fostering high masculine and high feminine behaviors across sexes.

Unfortunately, such recommendations are likely to be misinterpreted as encouraging masculine behavior in general across sexes. The PAQ and BSRI are typically viewed as representing global masculinity and femininity, despite repeated attempts by Spence to clarify the specific aspect of masculinity identified by these scales. If therapists are

urged to foster masculinity in their clients, it is possible that they may not foster that specific dominance-poise component of masculinity, but rather masculinity as they personally interpret it. Thus the danger exists that they may encourage the gamut of characteristics which make up their own personal constructs of masculinity. Findings from the Sex-Rep indicate that this would probably not be healthy for women.

A number of factors indicate that the relationship between masculinity and adjustment is merely measurement artifact. First, there is the suggestion by Pedhazur and Tetenbaum (1979) that BSRI masculine traits are more desirable than BSRI feminine traits. Although this would explain the strong relationship between M and adjustment, as well as the inconsistent relationship between F and adjustment, more research is needed to substantiate that these desirability differences actually do exist.

Second, when masculinity is determined from personal constructs, it is not related to adjustment for women, and its linkage to adjustment for men is lessened. This goes hand in hand with the finding that women rated their feminine constructs as more desirable than their masculine constructs, indicating that masculinity may not be as revered, and certainly not as universally revered in our society as some researchers have suggested (Taylor & Hall, 1982).

Third, there is evidence that the BSRI M scale is confounded with self-esteem. This may have resulted from the

selection of only highly desirable traits to represent M, from defining masculinity as self-confidence, or both. Regardless of whether or not there are desirability differences between M and F, a large body of research (Locksley & Colten, 1979; Lubinski et al., 1983; Taylor & Hall, 1982) as well as the present findings, point to a significant overlap between BSRI M and self-esteem. If masculinity in our culture is strongly related to self-esteem, there should be actual self-esteem differences between men and women. The present study not only failed to find actual self-esteem differences between men and women, but actually found that removing self-esteem effects from the BSRI M scale enhanced its ability to discriminate between the sexes. Even if our society perceives masculinity as self-confidence, if males are not higher in self-esteem than females, a sex-role inventory which defines masculinity as self-confidence can only reinforce and perpetuate society's distortion of reality.

If masculinity, as measured by the BSRI and the PAQ, is made up of two components: (a) a masculinity component which allows for discrimination between the sexes, and (b) a self-esteem component which results in consistent relationships between M and adjustment, some puzzling findings begin to make sense. For example, Helmreich et al. (1979) found that masculine subjects performed better on feminine tasks than feminine subjects. How can this be accounted for as a masculinity effect? It makes more sense to interpret this as resulting from the higher self-esteem of the high M scorers.

Instead of suggesting that masculine subjects are more behaviorally flexible than others, this would suggest that high self-esteem allows for better performance on a variety of tasks, and is in fact a more potent performance factor than the sex-type of task. Also, as outlined earlier, findings from the present investigation that high BSRI masculinity is related to increased meaningfulness of sex-inconsistent constructs is also better explained as a self-esteem rather than a masculinity effect. In sum, researchers would do well to look before they leap onto the masculinity-is-ideal bandwagon, as perhaps they should have done with the "ideal" of androgyny.

The present paper does not suggest that the BSRI and the PAQ are not sex-role instruments. That they discriminate between the sexes indicates that they do tap some component of sex-role. However, it is difficult to determine whether results from these instruments reflect sex-role effects or self-esteem effects which may be confounding the M scales. These instruments might be improved by including a representative sampling of desirable and undesirable traits on their M and F scales. Spence et al.'s (1979) development of negative masculinity and femininity scales could be useful in describing a more complete type of sex-role classification.

The Sex-Rep is not intended as a replacement for the BSRI or the PAQ. It can shed light on some issues which have been raised regarding those inventories by comparing results from the Sex-Rep with those from the BSRI or PAQ. The Sex-Rep,

whose major strengths include: not assigning traits of preselected desirability to the M and F scales a priori, the use of individually relevant descriptors, the provision of a context for the elicitation and use of those descriptors, and the ability to accommodate rapidly changing conceptualizations of masculinity and femininity; is primarily addressed to different questions than those asked by the PAQ and the BSRI. While the BSRI and PAQ examine societal questions about stereotyped masculinity and femininity, the Sex-Rep investigates a more personal, individualized, type of gender identification. However, although it is derived from the unique perspectives of each individual, the Sex-Rep may be used to answer such nomothetic questions as the following:

- (a) Are people's personal definitions of masculinity and femininity similar to stereotypes?
- (b) Are personal definitions of masculinity and femininity equally desirable?
- (c) What is the relationship between identification with personal sex-role attributes and psychological health?

If the answers to the above questions, which were all evaluated in this study, had indicated that personal constructs of sex-role operated in much the same way as stereotypes, there might have been no further use for the Sex-Rep. However, since there is apparently little overlap between gender-related personal construals and social stereotypes, it is important to discover the effects of personal gender identity on personality and behavior. Finally, it should be noted that

the Sex-Rep may be used ideographically to examine the individual's unique construal of sex-role. Thus it can be a useful therapeutic tool for discovering and remediating maladaptive constructions related to gender identification.



Appendix A  
Informed Consent Form

I, \_\_\_\_\_ agree to participate in this study investigating the relationship among a number of diverse personality measures. I understand that there is no therapy or treatment of any kind involved, and that the research is being conducted by a doctoral student in clinical psychology, under the supervision of Joseph W. Critelli, Ph.D. I further understand that my responses are anonymous and will remain so.

\_\_\_\_\_  
Participant signature

\_\_\_\_\_  
Witness signature

Appendix B  
Demographic Sheet

Subject Number \_\_\_\_\_

AGE: \_\_\_\_\_

NUMBER OF CHILDREN: \_\_\_\_\_

PLEASE CIRCLE THE APPROPRIATE RESPONSE BELOW

SEX: 1. Male 2. Female

MARITAL STATUS:

1. Married 2. Single 3. Divorced

HIGHEST EDUCATIONAL LEVEL ATTAINED:

1. Elementary or Junior High School 2. High School

3. College 4. Graduate School

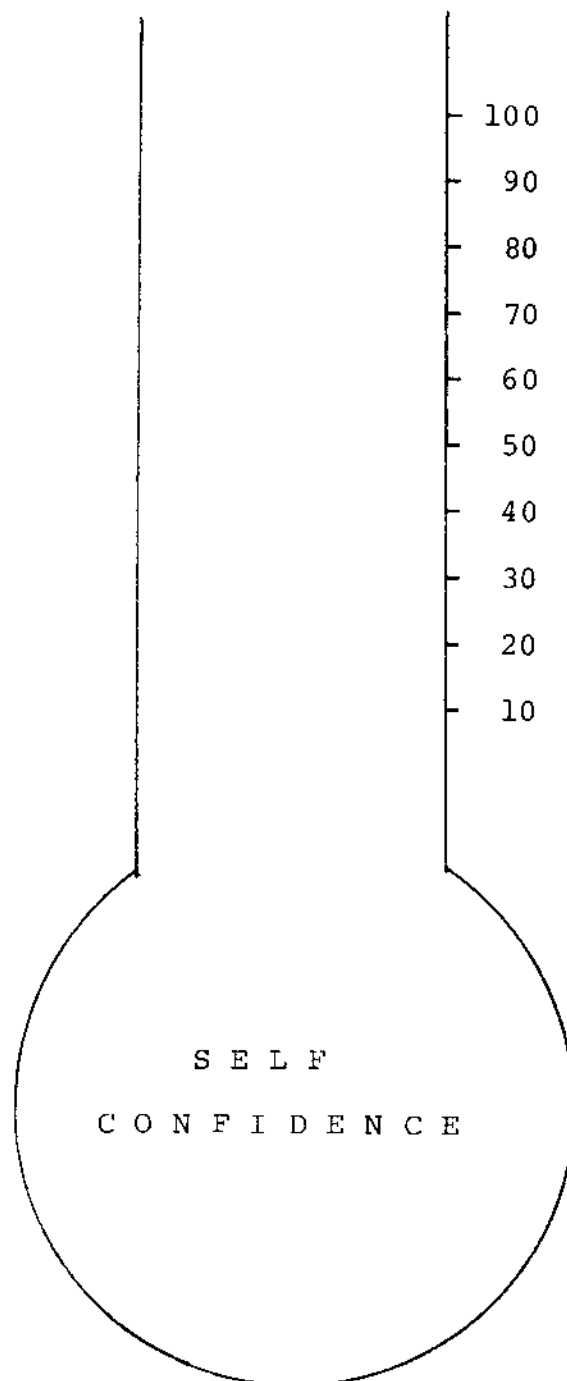
SOCIO-ECONOMIC STATUS:

1. lower 2. middle 3. upper income group

## Appendix C

## Self Concept Thermometer

Please indicate how self-confident you feel by drawing a line across the thermometer.



## Appendix D

Name \_\_\_\_\_ Number \_\_\_\_\_ Condition \_\_\_\_\_  
 Date \_\_\_\_\_.

## BECK INVENTORY

On this questionnaire there are groups of statements. Please read the entire group of statements in each category. Then pick out the one statement in that group which best describes the way you feel today, that is, right now! Circle the number beside the statement you have chosen. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

- A 0 I do not feel sad.  
 1 I feel sad.  
 2 I am sad all the time and can't snap out of it.  
 3 I am so sad or unhappy that I can't stand it.
- B 0 I am not particularly discouraged about the future.  
 1 I feel discouraged about the future.  
 2 I feel I have nothing to look forward to.  
 3 I feel that the future is hopeless and that things can't improve.
- C 0 I do not feel like a failure.  
 1 I feel I have failed more than the average person.  
 2 As I look back on my life, all I see is a lot of failure.  
 3 I feel I am a complete failure as a person.
- D 0 I get as much satisfaction out of things as I used to.  
 1 I don't enjoy things the way I used to.  
 2 I don't get real satisfaction out of anything anymore.  
 3 I am dissatisfied or bored with everything.
- E 0 I don't feel particularly guilty.  
 1 I feel guilty a good part of the time.  
 2 I feel quite guilty most of the time.  
 3 I feel guilty all of the time.
- F 0 I don't feel I am being punished.  
 1 I feel I may be punished.  
 2 I expect to be punished.  
 3 I feel I am being punished.
- G 0 I don't feel disappointed in myself.  
 1 I am disappointed in myself.  
 2 I am disgusted with myself.  
 3 I hate myself.

- H 0 I don't feel I am any worse than anybody else.  
1 I am critical of myself for my weaknesses or mistakes.  
2 I blame myself all of the time for my faults.  
3 I blame myself for everything bad that happens.
- I 0 I don't have any thoughts of killing myself.  
1 I have thoughts of killing myself, but I would not carry them out.  
2 I would like to kill myself.  
3 I would kill myself if I had the chance.
- J 0 I don't cry any more than usual.  
1 I cry now more than I used to.  
2 I cry all the time now.  
3 I used to be able to cry, but now I can't cry even though I want to.
- K 0 I am no more irritated now than I ever am.  
1 I get annoyed or irritated more easily than I used to.  
2 I feel irritated all the time now.  
3 I don't get irritated at all by the things that used to irritate me.
- L 0 I have not lost interest in other people.  
1 I am less interested in other people than I used to be.  
2 I have lost most of my interest in other people.  
3 I have lost all of my interest in other people.
- M 0 I make decisions about as well as I ever could.  
1 I put off making decisions more than I used to.  
2 I have greater difficulty in making decisions than before.  
3 I can't make decisions at all anymore.
- N 0 I don't feel I look any worse than I used to.  
1 I am worried that I am looking old or unattractive.  
2 I feel that there are permanent changes in my appearance that make me look unattractive.
- O 0 I can work about as well as before.  
1 It takes an extra effort to get started at doing something.  
2 I have to push myself very hard to do anything.  
3 I can't do any work at all.
- P 0 I can sleep as well as usual.  
1 I don't sleep as well as I used to.  
2 I wake up one to two hours earlier than usual and find it hard to get back to sleep.  
3 I wake up several hours earlier than I used to and cannot get back to sleep.

- Q 0 I don't get more tired than usual.  
1 I get tired more easily than I used to.  
2 I get tired from doing almost anything.  
3 I am too tired to do anything.

- R 0 My appetite is no worse than usual.  
1 My appetite is not as good as it used to be.  
2 My appetite is much worse now.  
3 I have no appetite at all anymore.

- S 0 I haven't lost much weight, if any, lately.  
1 I have lost more than 5 pounds.  
2 I have lost more than 10 pounds.  
3 I have lost more than 15 pounds.

I am purposely trying to lose weight by eating less.

Yes \_\_\_\_\_ No \_\_\_\_\_

- T 0 I am not more worried about my health than usual.  
1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.  
2 I am very worried about physical problems and it's hard to think of much else.  
3 I am so worried about my physical problems, that I cannot think about anything else.

- U 0 I have not noticed any recent change in my interest in sex.  
1 I am less interested in sex than I used to be.  
2 I am much less interested in sex now.  
3 I have lost interest in sex completely.

## Appendix E

## Bem Sex Role Inventory

For each characteristic, select a number from the scale below which most accurately describes how you see yourself. Write the number in the space provided. Please respond to the items in numerical order.

1	2	3	4	5	6
never or almost never	infrequently	occasionally	half of the time	often	frequently

7  
always or  
almost always

- |                                      |       |                                     |       |
|--------------------------------------|-------|-------------------------------------|-------|
| 1. self-reliant                      | _____ | 2. yielding                         | _____ |
| 3. helpful                           | _____ | 4. defends own<br>belief            | _____ |
| 5. cheerful                          | _____ | 6. moody                            | _____ |
| 7. independent                       | _____ | 8. shy                              | _____ |
| 9. conscientious                     | _____ | 10. athletic                        | _____ |
| 11. affectionate                     | _____ | 12. theatrical                      | _____ |
| 13. assertive                        | _____ | 14. flatterable                     | _____ |
| 15. happy                            | _____ | 16. strong<br>personality           | _____ |
| 17. loyal                            | _____ | 18. unpredictable                   | _____ |
| 19. forceful                         | _____ | 20. feminine                        | _____ |
| 21. reliable                         | _____ | 22. analytical                      | _____ |
| 23. sympathetic                      | _____ | 24. jealous                         | _____ |
| 25. has leadership<br>qualities      | _____ | 26. sensitive to<br>needs of others | _____ |
| 27. truthful                         | _____ | 28. willing to take<br>risks        | _____ |
| 29. understanding                    | _____ | 30. secretive                       | _____ |
| 31. makes decisions<br>easily        | _____ | 32. compassionate                   | _____ |
| 33. sincere                          | _____ | 34. self-sufficient                 | _____ |
| 35. eager to soothe<br>hurt feelings | _____ | 36. conceited                       | _____ |
| 37. dominant                         | _____ | 38. soft-spoken                     | _____ |
| 39. likable                          | _____ | 40. masculine                       | _____ |
| 41. warm                             | _____ | 42. solemn                          | _____ |
| 43. willing to take<br>a stand       | _____ | 44. tender                          | _____ |
| 45. friendly                         | _____ | 46. aggressive                      | _____ |
| 47. gullible                         | _____ | 48. inefficient                     | _____ |
| 49. acts as a leader                 | _____ | 50. childlike                       | _____ |
| 51. adaptable                        | _____ | 52. individualistic                 | _____ |
| 53. does not use<br>harsh language   | _____ | 54. unsystematic                    | _____ |

55. competitive \_\_\_\_\_  
57. tactful \_\_\_\_\_  
59. gentle \_\_\_\_\_

56. loves children \_\_\_\_\_  
58. ambitious \_\_\_\_\_  
60. conventional \_\_\_\_\_



## Appendix F

## Texas Social Behavior Inventory

The Texas Social Behavior Inventory is designed to gather information and social behavior data. Please answer by circling the letter that you decide is the best answer to each particular question.

1. I am not likely to speak to people until they speak to me.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

2. I would describe myself as self-confident.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

3. I feel confident of my appearance

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

4. I am a good mixer.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

5. When in a group of people I have trouble thinking of the right things to say.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

6. When in a group of people, I usually do what the others want rather than make suggestions.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

7. When I am in disagreement with other people, my opinion usually prevails.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

8. I would describe myself as one who attempts to master situations.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

9. Other people look up to me.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

10. I enjoy social gatherings just to be with people.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

11. I make a point of looking other people in the eye.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

12. I cannot seem to get others to notice me.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

13. I would rather not have very much responsibility for other people.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

14. I feel comfortable being approached by someone in a position of authority.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

15. I would describe myself as indecisive.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

16. I have no doubts about my social competence.

a	b	c	d	e
Not at all characteristic of me	Not Very	Slightly	Fairly	Very much characteristic of me

## Appendix G

Sex RepRole Specification Sheet

You may use these role instructions for each of your response sheets.

Find the slanted lines in the upper left-hand corner of the RESPONSE SHEET.

1. Write the first name of a person whom you consider very feminine on the first diagonal.
2. Write the first name of another person whom you consider very feminine on the second diagonal.
3. Write the first name of a third person whom you consider very feminine on the third diagonal. Do not repeat names.
4. Write the first name of a person whom you consider very masculine on the fourth diagonal.
5. Write the first name of another person whom you consider very masculine on the fifth diagonal.
6. Write the first name of a third person whom you consider very masculine on the sixth diagonal.

Do your best to find people who fit each discription. Do not repeat names. If the directions below specify a person whose name you have already used, please substitute a different but very similar person. For example, if the instructions ask you to list your mother on the eighth diagonal but you have already selected her in number 1 above as a feminine person, then you would write the name of someone other than your mother


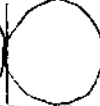

on the eighth diagonal. You might decide that a sister or aunt etc. was somewhat motherly toward you and write their name in the diagonal specified for mother. Do not repeat names. If you know two people with the same first name, use a last initial as well.

7. Write your own name on the seventh diagonal.
8. Write the name of your mother or the person who has played the part of your mother.
9. Write the name of your father or the person who has played the part of your father.
10. Write the name of your husband (wife) or closest present boy-(girl-) friend.
11. Write the name of the happiest person you know personally.
12. Write the name of the most unsuccessful person you know personally.

DIRECTIONS FOR RESPONSE SHEET #1

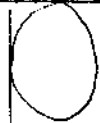

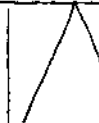
1. Below your list of names, find Row A. Notice that Row A has two yellow circles. Look at the names above the yellow circles. Think carefully about these two people. Using your own idea of what "feminine" means, think of a feminine way in which these two people seem alike. Write the way in which these two people are alike in the pink space (Row A, Column 1).

## RESPONSE SHEET

Example:	Sal 1	Peg 2	Sue 3	Dan 7	Ted 8	Column 1	Column 2
Row A						sweet	

2. Now look at Row A again. Notice that there is a blue triangle in Row A. Look at the name above the blue triangle. Think of a way in which this person is different from the two who are alike. Write the way in which this person is different in the green space (Row A, Column 2).

## RESPONSE SHEET

Example:	Sal	Peg	Sue	Dan	Ted	Column 1	Column 2
Row A						sweet	cold

3. After you finish Row A, Complete Row B, Row C, etc. Follow the same instructions. Try not to repeat descriptive words.

4. For Row A, look over the pink description you wrote under Column 1 and the green description you wrote under Column 2. Notice that between your two descriptions is a rating scale +6+5+4+3+2+1 0-1-2-3-4-5-6. Use your descriptions and this rating scale to give your impression of each person in Row A.

RESPONSE SHEET

Example:	Sal	Peg	Sue	Dan	Ted	Column 1	0	Column 2
Row A	+5	+2	-4	-6	-2	Formal +6+5+4+3+2+1	-1-2-3-4-5-6	Humorous
Row B	-3	-6	+3	-2	-6	Honest +6+5+4+3+2+1	-1-2-3-4-5-6	Shady

In the example above, both Sal (+5) and Peg (+2) are rated as being "formal." Since Sal has a higher rating than Peg, this indicates that she is more formal than Peg. On the other hand, both Sue (-4) and Dan (-6) are rated as being "humorous." Since Dan has a higher rating than Sue, this indicates that he is more humorous than Sue. Begin on Row A and give your impression of person #1 using the rating scale. Then give your impression of person #2. Then rate person #3, person #4, and so on till all of the spaces in Row A are filled. Then go on to Row B, Row C, etc. Follow the same instructions until you have filled all the squares.

ZERO RATINGS: Use a 0 rating when you do not know the person well enough to give your impression, or when neither description fits the person you are trying to rate.

5. Look over the pink and green descriptions you wrote for Row A. Using the following scale.

1	2	3	4	5	6	7	8	9	10
Not at All Desirable				Somewhat Desirable					Extremely Desirable










RATE the pink description and then the green description by writing a number from 1 to 10 over the word. The numbers from 1 to 10 refer to how desirable this trait would be for you yourself. For example, if you think that it is somewhat desirable for you to be formal, you would write the number 5 over the word "formal" 5. If you think it is extremely (formal)

desirable for you to be humorous, you would write the number 10 over the word "humorous" 10. After you finish (humorous)

rating both the pink and the green words for Row A, go on and rate the words under Column 1 and Column 2 for Row B, Row C, etc. Follow the same instructions until you have rated all the words under Columns 1 and 2.






Appendix G--continued

	1	2	3	4	5	6	7	8	9	10	11	12	Column 1	Column 2	
Row A														+6+5+4+3+2+1	0-1-2-3-4-5-6
Row B														+6+5+4+3+2+1	0-1-2-3-4-5-6
Row C														+6+5+4+3+2+1	0-1-2-3-4-5-6
Row D														+6+5+4+3+2+1	0-1-2-3-4-5-6
Row E														+6+5+4+3+2+1	0-1-2-3-4-5-6
Row F														+6+5+4+3+2+1	0-1-2-3-4-5-6

Directions for Response Sheet #2




1. Below your list of names, find Row A. Notice that Row A has two yellow circles. Look at the names above the yellow circles. Think carefully about these two people. Using your own idea of what "masculine" means, think of a masculine way in which these two people seem alike. Write the way in which these two people are alike in the pink space (Row A, Column 1).

RESPONSE SHEET

Example:	Sal	Peg	Sue	Dan	Ted	Column 1	Column 2
Row A						Tough	

2. Now look at Row A again. Notice that there is a blue triangle in Row A. Look at the name above the blue triangle. Think of a way in which this person is different from the two who are alike. Write the way in which this person is different in the green space (Row A, Column 2).

RESPONSE SHEET

Example:	Sal	Peg	Sue	Dan	Ted	Column 1	Column 2
Row A						Tough	Tender

3. After you finish Row A, complete Row B, Row C, etc. Follow the same instructions. Try not to repeat descriptive words.

4. For Row A, look over the pink description you wrote under Column 1 and the green description you wrote under Column 2. Notice that between your two descriptions is a rating scale +6+5+4+3+2+1 0-1-2-3-4-5-6. Use your descriptions and this rating scale to give your impression of each person in Row A.

## RESPONSE SHEET

Example:	Sal	Peg	Sue	Dan	Ted	Column 1	0	Column 2
Row A	+5	+2	-4	-6	-2	Formal +6+5+4+3+2+1	-1-2-3-4-5-6	Humorous
Row B	-3	-6	+3	-2	-6	Honest +6+5+4+3+2+1	-1-2-3-4-5-6	Shady

In the example above, both Sal (+5) and Peg (+2) are rated as being "formal." Since Sal has a higher rating than Peg, this indicates that she is more formal than Peg. On the other hand, both Sue (-4) and Dan (-6) are rated as being "humorous." Since Dan has a higher rating than Sue, this indicates that he is more humorous than Sue. Begin on Row A and give your impression of person #1 using the rating scale. Then give your impression of person #2. Then rate person #3, person #4, and so on till all of the spaces in Row A are filled. Then go on to Row B, Row C, etc. Follow the same instructions until you have filled all the squares.

ZERO RATINGS: Use a 0 rating when you do not know the person well enough to give your impression, or when neither description fits the person you are trying to rate.

5. Look over the pink and green descriptions you wrote for Row A. Using the following scale.

1	2	3	4	5	6	7	8	9	10
Not at All Desirable				Somewhat Desirable					Extremely Desirable

RATE the pink description and then the green description by writing a number from 1 to 10 over the word. The numbers from 1 to 10 refer to how desirable this trait would be for you yourself. For example, if you think that it is somewhat desirable for you to be formal, you would write the number 5 over the word "formal" 5. If you think it is extremely

(formal)

desirable for you to be humorous, you would write the number 10 over the word "humorous" 10. After you finish

(humorous)

rating both the pink and the green words for Row A, go on and rate the words under Column 1 and Column 2 for Row B, Row C, etc. Follow the same instructions until you have rated all the words under Columns 1 and 2.




Appendix G--continued

	1	2	3	4	5	6	7	8	9	10	11	12	Column 1	Column 2
Row A														+6+5+4+3+2+1 0-1-2-3-4-5-6
Row B														+6+5+4+3+2+1 0-1-2-3-4-5-6
Row C														+6+5+4+3+2+1 0-1-2-3-4-5-6
Row D														+6+5+4+3+2+1 0-1-2-3-4-5-6
Row E														+6+5+4+3+2+1 0-1-2-3-4-5-6
Row F														+6+5+4+3+2+1 0-1-2-3-4-5-6

Directions for Response Sheet #3




1. Below your list of names, find Row A. Notice that Row A has two yellow circles. Look at the names above the yellow circles. Think carefully about these two people. Think of some one way in which these two people are alike. Write the way in which these two people are alike in the pink space (Row A, Column 1).

## RESPONSE SHEET

Example:	Sal	Peg	Sue	Dan	Ted	Column 1	Column 2
Row A						Cheerful	

2. Now look at Row A again. Notice that there is a blue triangle in Row A. Look at the name above the blue triangle. Think of a way in which this person is different from the two who are alike. Write the way in which this person is different in the green space (Row A, Column 2).

## RESPONSE SHEET

Example:	Sal	Peg	Sue	Dan	Ted	Column 1	Column 2
Row A						Cheerful	Sad

3. After you finish Row A, complete Row B, Row C, etc. Follow the same instructions. Try not to repeat descriptive words.

4. For Row A, look over the pink description you wrote under Column 1 and the green description you wrote under Column 2. Notice that between your two descriptions is a rating scale +6+5+4+3+2+1 0-1-2-3-4-5-6. Use your descriptions and this rating scale to give your impression of each person in Row A.

## RESPONSE SHEET

Example:	Sal	Peg	Sue	Dan	Ted	Column 1	0	Column 2
Row A	+5	+2	-4	-6	-2	Formal +6+5+4+3+2+1	-1-2-3-4-5-6	Humorous
Row B	-3	-6	+3	-2	-6	Honest +6+5+4+3+2+1	-1-2-3-4-5-6	Shady

In the example above, both Sal (+5) and Peg (+2) are rated as being "formal." Since Sal has a higher rating than Peg, this indicates that she is more formal than Peg. On the other hand, both Sue (-4) and Dan (-6) are rated as being "humorous." Since Dan has a higher rating than Sue, this indicates that he is more humorous than Sue. Begin on Row A and give your impression of person #1 using the rating scale. Then give your impression of person #2. Then rate person #3, person #4, and so on till all of the spaces in Row A are filled. Then go on to Row B, Row C, etc. Follow the same instructions until you have filled all the squares.

ZERO RATINGS: Use a 0 rating when you do not know the person well enough to give your impression, or when neither description fits the person you are trying to rate.

5. Look over the pink and green descriptions you wrote for Row A. Using the following scale.

1	2	3	4	5	6	7	8	9	10
Not at All Desirable				Somewhat Desirable					Extremely Desirable

RATE the pink description and then the green description by writing a number from 1 to 10 over the word. The numbers from 1 to 10 refer to how desirable this trait would be for you yourself. For example, if you think that it is somewhat desirable for you to be formal, you would write the number 5 over the word "formal" 5. If you think it is extremely

(formal)

desirable for you to be humorous, you would write the number 10 over the word "humorous" 10. After you finish

(humorous)

rating both the pink and the green words for Row A, go on and rate the words under Column 1 and Column 2 for Row B, Row C, etc. Follow the same instructions until you have rated all the words under Columns 1 and 2.



Appendix G--continued

	1	2	3	4	5	6	7	8	9	10	11	12	Column 1	Column 2
Row A													+6+5+4+3+2+1	0-1-2-3-4-5-6
Row B													+6+5+4+3+2+1	0-1-2-3-4-5-6
Row C													+6+5+4+3+2+1	0-1-2-3-4-5-6
Row D													+6+5+4+3+2+1	0-1-2-3-4-5-6
Row E													+6+5+4+3+2+1	0-1-2-3-4-5-6
Row F													+6+5+4+3+2+1	0-1-2-3-4-5-6
Row G													+6+5+4+3+2+1	0-1-2-3-4-5-6
Row H													+6+5+4+3+2+1	0-1-2-3-4-5-6

## Appendix H

Table 12

Means and Standard Deviations for Dependent Variables

Variable	N	Males		N	Females	
		Mean	S.D.		Mean	S.D.
SUB	100	131	92	108	108	70
AGE	100	21	3	108	22	5
SES	100	2	0	108	2	0
RACE	100	2	1	108	1	1
SRF	100	4	15	108	13	13
AF	100	13	9	108	18	8
FD	99	37	12	105	42	12
NFD	99	31	11	105	28	11
SRM	100	12	13	108	3	14
AM	100	17	8	108	12	8
MD	98	39	11	105	34	12
NMD	98	30	12	105	31	11
THERM	100	81	14	108	77	12
BECK	100	7	6	108	6	6
TSBI	100	43	10	108	44	8
BMASC	100	105	15	107	97	14
BFEM	100	97	12	107	103	12
BSRC	100	2	1	107	2	1
KSRC	95	2	1	105	2	1
ASRC	100	2	1	108	2	1

Variable	N	Males		N	Females	
		Mean	S.D.		Mean	S.D.
DESCL	100	2	1	108	2	1
INDSRC	88	2	1	99	2	1
CONGR	100	2	0	108	2	0
KCONGR	100	2	1	108	2	1

Legend

SUB	= Subject
AGE	= Age
SES	= Socioeconomic Status
RACE	= Race
SRF	= Sex-Rep Femininity
AF	= Adjusted Femininity
FD	= Feminine Desirability
NFD	= Nonfeminine Desirability
SRM	= Sex-Rep Masculinity
MD	= Masculine Desirability
NMD	= Nonmasculine Desirability
THERM	= Self-Concept Thermometer
BECK	= Beck Depression Inventory
TSBI	= Texas Social Behavior Inventory
BMASC	= BSRI Masculinity
BFEM	= BSRI Femininity
BSRC	= Bem Sex-Role Classification
KSRC	= Sex-Rep Sex-Role Classification
AM	= Adjusted Masculinity

ASRC = Adjusted Sex-Role Classification  
DESCL = Desirability Classification  
INDSRC = Individual Sex-Role Classification  
CONGR = Congruency  
KCONGR = Individual Congruency

Appendix I

Table 13

Intercorrelations Among Dependent Variables

Males

	SUB	AGE	SES	RACE	SRF	AF	FD	NFD
SUB	1.00000*	0.07275	-0.17125	0.04074	0.04216	0.05986	-0.04566	-0.00057
AGE	0.07275	1.00000*	-0.19103	0.06415	0.01236	0.13015	0.13691	0.11971
SES	-0.17125	-0.19103	1.00000*	-0.13768	0.10707	0.06638	0.00257	-0.12483
RACE	0.04074	0.06415	-0.13768	1.00000*	-0.08778	0.00276*	-0.05144	0.11191
SRF	0.04216*	0.01236*	0.10707	-0.08778	1.00000*	0.91693*	0.43558*	-0.41163*
AF	0.05986	0.13015	0.06638	0.00276	0.91693*	1.00000*	0.46170*	-0.22521*
FD	-0.04566	0.13691	0.00257	-0.05144	0.43558*	0.46170*	1.00000*	-0.25321*
NFD	-0.00057	0.11971	-0.12483	0.11191	-0.41163*	-0.22521*	-0.25321*	1.00000*
SRM	-0.03928	0.06197	0.01561	0.18808	0.00830	0.07271	0.03043	-0.10728
AM	-0.04339	0.15565	-0.03475	0.28116*	-0.05168	-0.06798	0.02204	0.01032
MD	0.12778	0.13968	0.03056	0.04012	0.03922	0.10768	0.30360*	0.01938
NMD	-0.02273	0.11327	-0.05335	-0.02834	-0.21768*	-0.13495	0.12001	0.36545*

Appendix I--continued

Males	SUB	AGE	SES	RACE	SRF	AF	FD	NFD
	THERM	0.12530	0.05235	0.25329*	-0.08297	0.08101	0.02669	0.13037
	BECK	-0.12680	-0.11523	-0.02441	0.00707	-0.11400	0.00564	-0.00901
	TSBI	0.10880	0.00416	0.09439	-0.04633	0.09442	0.00287	0.08317
	BMASC	0.17068	0.01192	0.05350	-0.12600	0.05167	0.08734	0.10883
	BFEM	0.28741*	-0.15308	-0.04978	0.00459	0.07740	0.19089	0.04019
	BSRC	-0.24547*	-0.05410	-0.04385	0.17051	0.00678	-0.08108	-0.19040
	KSRC	-0.07510	-0.06117	-0.24485*	-0.09344	-0.10919	-0.01512	0.09449
	ASRC	-0.11532	-0.06728	-0.24980*	-0.02294	-0.08084	-0.00118	0.00249
	DESL	-0.07524	-0.03136	-0.01275	-0.12903	-0.13110	-0.30046*	0.03046
	INDSRC	0.01227	-0.02320	0.04982	-0.92891*	-0.68611*	-0.34299*	0.39973*
	CONGR	-0.03511	-0.14653	-0.10721	-0.08894	-0.06987	-0.09403	0.07741
	KCONGR	0.10578	-0.27830*	-0.15932	0.02172	0.00606	0.26692*	-0.07244

Appendix I--continued

Males	SRM	AM	MD	NMD	THERM	BECK	TSBI	BMASC
SUB	-0.03928	-0.04339	-0.12778	-0.02273	-0.04214	-0.04268	-0.01368	-0.01319
AGE	0.06197	0.15565	0.13969	0.11327	0.12530	-0.12680	0.10880	0.17068
SES	0.01561	-0.03475	0.03056	-0.05335	0.05235	-0.11523	0.00416	0.01192
RACE	0.18808	0.28116	0.04012*	-0.02834*	0.25329*	-0.02441	0.09439	0.05350
SRF	0.00830	-0.05168	0.03922	-0.21768*	-0.08297	0.00707	-0.04633	-0.12600
AF	0.07271	0.06798	0.10768	-0.13495	0.08101	-0.11400	0.09442	0.05167
FD	0.03043	0.02204	0.30360*	0.12000	0.02669	0.00564	0.00287	0.08734
NFD	-0.10728	0.01032	0.01938	0.36545*	0.13037	-0.00901	0.08317	0.10883
SRM	1.00000*	0.94337*	0.94337*	-0.40770*	0.28351*	0.24199*	0.17430	0.35457*
AM	0.94337*	1.00000*	0.46333*	-0.31627*	0.36391*	-0.23732*	0.22146*	0.42096*
MD	0.47916	0.46333*	1.00000*	-0.15030	0.18017	-0.12832	0.22952*	0.37597*
NMD	-0.40770*	-0.31627*	-0.15030	1.00000*	-0.00830	0.06656	0.05503	0.16546

Appendix I--continued

Males	SRM	AM	MD	NMD	THERM	BECK	TSBI	BMASC
THERM	0.28351*	0.36391*	0.18017	-0.00830	1.00000*	-0.46518*	0.43313*	0.50023*
BECK	-0.24199*	-0.23732*	-0.12832	0.06656	-0.46518*	1.00000*	-0.39677*	-0.38259*
TSBI	0.17430	0.22146*	0.22952*	0.05503	0.43313*	-0.39677*	1.00000*	0.52154*
BMASC	0.35457*	0.42096*	0.37597*	0.16546	0.50025	-0.38259*	0.52154*	1.00000*
BFEM	-0.13868	-0.10281	0.08131	0.23512*	-0.01327	0.02830	-0.06258	-0.01398
BSRC	-0.24818*	-0.31977*	-0.28447*	-0.20853*	-0.39489*	0.23697*	-0.31675*	-0.70756*
KSRC	-0.68416*	-0.68576*	-0.25130*	0.27021*	-0.13965	0.14966	-0.03810	-0.27220*
ASRC	-0.68692*	-0.72826*	-0.30878*	0.18161	-0.27491*	0.16773	-0.11658	-0.38814*
DESL	-0.25846*	-0.27877*	-0.74964*	0.03449	-0.07751	0.02619	-0.10745	-0.27091*
INDSRC	-0.36869*	-0.20674	-0.24487*	0.29027*	0.06437	-0.01031	-0.03410	0.01173
CONGR	-0.17279	-0.17440	-0.31591*	0.09916	0.05790	0.00830	-0.07060	-0.09775
KCONGR	-0.11519	-0.13160	0.03497	0.20923*	-0.09215	-0.00994	-0.03676	-0.06821



Appendix I--continued

Males	BSRC	KSRC	ASRC	DESCL	INDSRC	CONGR	KCONGR	BFEM
SUB	0.04360	0.11513	0.08763	0.06506	-0.01226	0.04807	0.02315	-0.9539
AGE	-0.24547*	-0.07510	-0.11532	-0.07524	0.01227	-0.03511	0.10578	0.28741*
SES	-0.05410	-0.06117	-0.06728	-0.03136	-0.02320	-0.14653	-0.27830*	-0.15308
RACE	-0.14385	-0.24485*	-0.24980*	-0.01275	0.04982	-0.10721	-0.15932	-0.04978
SRF	0.17051	-0.09344	-0.02294	-0.12903	-0.72891*	-0.08894	0.02172	0.00459
AF	0.00678	-0.10919	-0.08084	-0.13110	-0.68611*	-0.06987	0.00606	0.07740
FD	-0.08108	-0.01512	0.00118	-0.30046*	-0.34299*	-0.09403	0.26692*	0.19089
NFD	-0.19040	0.09449	0.00249	0.03046	0.39973*	0.07741	-0.07244	0.04019
SRM	-0.24818*	-0.68416*	-0.68692*	-0.25846*	-0.36869*	-0.17279	-0.11519	-0.13868
AM	-0.31977*	-0.68576*	-0.72826*	-0.27877*	-0.20674	-0.17440	-0.13160	-0.10281
MD	-2.28447*	-0.25130*	-0.30878*	-0.74964*	-0.24487*	-0.31591*	0.03497	0.08131
NMD	-0.20853*	0.27021*	0.18161	0.03449	0.29027*	0.09916	0.20923*	0.23512*

Appendix I--continued

MaLes	BSRC	KSRC	ASRC	DESL	INDSRC	CONGR	KCONGR	BFEM
THERM	-0.39489*	-0.13965	-0.27491*	-0.07751	0.06437	0.05790	-0.09215	-0.01327
BECK	0.23697	0.14966	0.13773	0.02619	-0.01031	0.00830	-0.00994	0.02830
TSBI	-0.31675*	-0.03810	-0.11658	-0.10745	-0.03410	-0.07060	-0.03676	-0.06258
EMASC	-0.70756*	-0.27220*	-0.38814*	-0.27091*	0.01173	-0.09775	-0.06820	-0.01390
BFEM	-0.09603	0.05586	0.12427	-0.04016	0.09590	-0.06721	0.10515	1.00000*
BSRC	1.00000*	0.25390*	0.29935*	0.16772	0.00000	0.05802	0.01010	-0.09603
KSRC	0.25390*	1.00000*	0.83146*	0.10817	0.21742*	0.02922	0.07626	0.05586
ASRC	0.29935*	0.83146*	1.00000*	0.22353*	0.18697	0.14194	0.15559	0.12427
DESL	0.16772	0.10817	0.22353*	1.00000*	0.17825	0.54161*	0.06019	-0.04016
INDSRC	0.00000	0.21742*	0.18697	0.17825	1.00000*	-0.09075	-0.03557	0.09590
CONGR	0.05802	0.02922	0.14194	0.54161*	-0.09075	1.00000*	0.33232*	-0.06721
KCONGR	0.01010	0.07626	0.15559	0.06019	-0.03557	0.33232*	1.00000*	0.10515

Appendix I--continued

Females	SUB	AGE	SES	RACE	SRF	AF	FD	NFD	
	SUB	1.00000*	0.09675	-0.02161	0.17769	-0.00522	0.02064	0.19070	-0.00353
	AGE	0.09675	1.00000*	-0.04283	-0.09974	-0.01766	-0.03887	-0.13263	-0.12068
	SES	-0.02161	-0.04283	1.00000*	-0.01588	-0.11558	-0.15813	-0.01873	-0.12817
	RACE	0.17769	-0.09974	-0.01588	1.00000*	0.16646	0.16997	0.09830	0.22709*
	SRF	-0.00522	-0.01766	-0.11558	0.16646	1.00000*	0.94775*	0.50084*	-0.43462*
	AF	0.02064	-0.03887	-0.15813	0.16997	0.94775*	1.00000*	0.55148*	-0.37523*
	FD	0.19070	-0.13263	-0.01873	0.09830	0.50084*	0.55148*	1.00000*	-0.23476*
	NFD	-0.00353	-0.12068	-0.12817	0.22709*	-0.43462*	-0.37523*	-0.23476*	1.00000*
	SRM	-0.14963	0.24144*	-0.01469	-0.13805	0.0612	0.01209	0.14289	0.14029
	AM	-0.16319	0.23500*	-0.09094	-0.14386	0.14904	0.14118	0.21314*	-0.15377
	MD	-0.04875	0.24894*	0.00329	-0.04814	0.06462	-0.05655	0.23663*	0.06339
	NMD	0.11951	-0.26171*	0.08722	0.19167	-0.18964	-0.13097	0.08929	0.36083*

Appendix I--continued

Females	SUB	AGE	SES	RACE	SRF	AF	FD	NFD
THERM	0.12235	0.10121	-0.03045	-0.15548	0.03277	-0.00902	-0.11813	-0.09613
BECK	-0.02482	-0.08411	0.08491	0.00796	-0.14630	-0.12834	0.10224	0.10166
TSBI	-0.07375	0.12588	-0.08250	-0.21583*	-0.01531	0.00553	-0.00778	-0.07805
BMASC	0.05865	0.04347	-0.05998	-0.16950	-0.02891	-0.03170	0.00452	0.11095
BFEM	-0.03130	-0.06057	0.02515	-0.05425	0.12034	0.11769	0.01128	0.00375
BSRC	0.02024	0.05782	0.07293	0.06995	-0.07967	-0.08591	-0.02906	-0.08608
KSRC	-0.01827	-0.18324	0.17602	0.00232	-0.68145*	-0.62987*	-0.30250*	0.38874*
ASRC	-0.03776	-0.06238	0.16736	-0.10367	-0.67469*	-0.69994*	-0.26876*	0.27329*
DESL	-0.19628*	0.03628	0.05203	-0.15493	-0.28051*	-0.28915*	-0.71836*	0.12863
INDSRC	0.26105*	-0.05241	0.01526	0.13799	-0.44071*	-0.32540*	-0.32880*	0.32755*
CONGR	-0.18183	-0.05695	0.09070	-0.01781	-0.11823	-0.16927	-0.46217*	0.14742
KCONGR	-0.00114	-0.02748	0.07880	0.02086	0.04454	0.02457	0.02637	0.09243

Appendix I--continued

Females	SRM	AM	MD	NMD	THERM	BECK	TSBI	BMASC
SUB	-0.14963	-0.16319	-0.14875	0.11951	0.12235	-0.02482	-0.07375	0.05865
AGE	0.24144*	0.23500*	0.24894*	-0.26171*	0.10121	-0.08411	0.12588	0.04347
SES	-0.01464	-0.09094	0.00329	0.08722	-0.03045	0.08491	-0.08250	-0.05998
RACE	-0.13805	-0.14386	-0.04814	0.19167	-0.15548	0.00796	-0.21583*	-0.16950
SRF	0.06012	0.14904	-0.06462	-0.18964	0.03277	-0.14630	-0.01531	-0.02891
AF	0.01209	0.14118	-0.05655	-0.13097	-0.00902	-0.12834	0.00553	-0.03170
FD	0.14289	0.21314*	0.23663*	0.08929	-0.11813	0.10224	-0.00778	0.00452
NFD	-0.14029	-0.15377	0.06339	0.36083*	-0.09613	0.10166	-0.07805	0.11095
SRM	1.00000*	0.92306*	0.55736*	-0.55660*	-0.07000	0.04935	-0.03508	0.15361
AM	0.92306*	1.00000*	0.57938*	-0.50282*	-0.05268	-0.03674	0.01029	0.23453*
MD	0.55736	0.57938	1.00000*	-0.17363	-0.05204	-0.05200	-0.01818	0.15713
NMD	-0.55660*	-0.50282*	-0.17363	1.00000*	-0.14955	0.08663	-0.06100	-0.01829

Appendix I--continued

Females	SRM	AM	MD	NMD	THERM	BECK	TSBI	BMASC
THERM	-0.07000	-0.05268	-0.05204	-0.14955	1.00000*	-0.47285*	0.33874*	0.26655*
BECK	0.04935	-0.03674	-0.05200	0.08663	-0.47285*	1.00000*	-0.11843	-0.07029
TSBI	-0.03508	0.01029	-0.01818	-0.06100	0.33874*	-0.11843	1.00000*	0.46438
BMASC	0.15361	0.23453*	0.15713	-0.01829	0.26655	-0.07029	0.46438	1.00000*
BFEM	-0.12522	-0.05401	-0.07595	-0.03172	-0.03770	-0.17091	0.10213	0.18570
BSRC	0.07389	0.00022	-0.03679	-0.00706	0.01168	0.11263	-0.15939	-0.27589*
KSRC	-0.18752	-0.22297*	0.00988	0.23687*	0.01908	0.07361	0.12278	-0.07272
ASRC	-0.06157	-0.15718	0.10426	0.23877*	-0.07703	0.11507	-0.02194	-0.11061
DESL	-0.12544	-0.16891	-0.21536*	-0.06819	0.02969	-0.09671	0.01666	-0.04564
INDSRC	-0.71645*	-0.67643*	-0.31513*	0.52107*	0.05276	0.07288	0.06353	-0.05785
CONGR	-0.02970	-0.09744	-0.15143	-0.05600	-0.05553	0.02860	-0.12520	-0.05198
KCONGR	0.02859	0.03067	0.12421	-0.01319	-0.19280*	0.19184*	-0.22494*	0.06304

Appendix I--continued

Females	BFEM	BSRC	KSRC	ASRC	DESCL	INDSRC	CONGR	KCONGR
SUB	-0.03130	0.02024	-0.01827	-0.03776	-0.191627	0.26105*	-0.18183	-0.00114
AGE	-0.06057	0.05782	-0.18324	-0.06238	0.03628	-0.05241	-0.05695	-0.02748
SES	0.02515	0.07293	0.17602	0.16736	0.05203	0.01526	0.09070	0.07880
RACE	-0.05425	0.06995	0.00232	-0.10367	-0.15493	0.13799	-0.01781	0.02086
SRF	0.12034	-0.07967	-0.68145*	-0.67469*	-0.28051*	-0.44071*	-0.11823	0.04454
AF	0.11796	-0.08591	-0.62987*	-0.69994*	-0.28915*	-0.32540*	-0.16927	0.02457
FD	0.01128	-0.02906	-0.30250*	-0.26876*	-0.71836*	-0.32880*	-0.46217*	0.02637
NFD	0.00375	-0.08608	0.38874*	0.27329*	0.12863	0.32755*	0.14742	0.09243
SRM	-0.12522	0.07389	-0.18752	-0.06157	-0.12544	-0.71645*	-0.02970	0.02859
AM	-0.05401	0.00022	-0.22297*	-0.15718	-0.16891	-0.67643*	-0.09744	0.03067
MD	-0.07595	-0.03679	0.00988	0.10426	-0.21536*	-0.31513*	-0.15143	0.12421
NMD	-0.03172	-0.00706	0.23687*	0.23877*	-0.06819	0.52107*	-0.05600	-0.01319

## Appendix I--continued

Females	BFEM	BSRC	KSRC	ASRC	DESL	INDSRC	CONGR	KCONGR
THERM	-0.03770	0.01168	0.01908	-0.07703	0.02969	0.05276	-0.05553	-0.19280*
BECK	-0.17091	0.11263	0.07361	0.11507	-0.07671	0.07288	0.02860	0.19184*
TSBI	0.10213	-0.15939	0.12278	-0.02194	0.01666	0.06353	-0.12520	-0.22494*
BMASC	0.18570	-0.27589*	-0.07272	-0.11061	-0.04564	-0.05785	-0.06198	0.06304
BFEM	1.00000*	-0.77875*	-0.16815	-0.10218	0.04158	0.05232	0.04829	0.00071
BSRC	-0.77875	1.00000*	0.06464	0.03274	-0.02355	0.03448	-0.09961	-0.10453
KSRC	-0.16815	0.06464	1.00000*	0.69241*	0.21588*	0.29301*	0.13037	-0.04514
ASRC	-0.10218	0.03274	0.69214*	1.00000*	0.20190*	0.17392	0.11663	-0.03906
DESL	0.04158	-0.02355	0.21588*	0.20190*	1.00000*	0.24459*	0.58440*	0.00240
INDSRC	0.05232	0.03448	0.29301*	0.17392	0.24459*	1.00000*	-0.04886	-0.12331
CONGR	0.04829	-0.09961	0.13037	0.11663	0.58440*	-0.04886	1.00000*	0.30714*
KCONGR	0.00071	-0.10453	-0.04514	-0.03906	0.00240	-0.12331	0.30714*	1.00000*

\* indicates p is significant at at least the .05 level.



Legend

SUB	= Subject
AGE	= Age
SES	= Socioeconomic Status
RACE	= Race
SRF	= Sex-Rep Femininity
AF	= Adjusted Femininity
FD	= Feminine Desirability
NFD	= Nonfeminine Desirability
SRM	= Sex-Rep Masculinity
AM	= Adjusted Masculinity
MD	= Masculine Desirability
NMD	= Nonmasculine Desirability
THERM	= Self-Concept Thermometer
BECK	= Beck Depression Inventory
TSBI	= Texas Social Behavior Inventory
BMASC	= BSRI Masculinity
BFEM	= BSRI Femininity
BSRC	= Bem Sex-Role Classification
KSRC	= Sex-Rep Sex-Role Classification
ASRC	= Adjusted Sex-Role Classification
DESCL	= Desirability Classification
INDSRC	= Individual Sex-Role Classification
CONGR	= Congruency
KCONGR	= Individual Congruency

## Appendix J

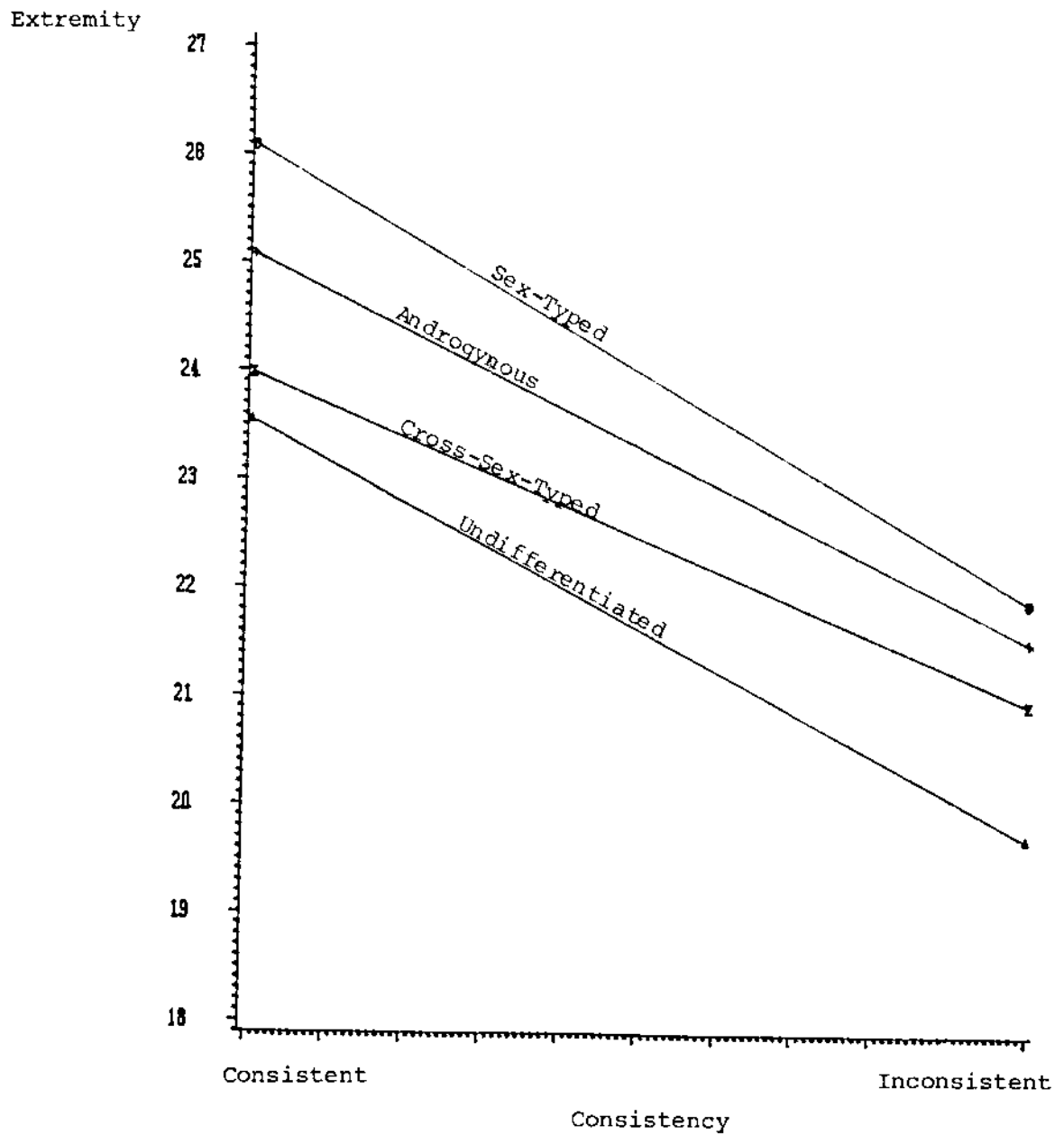


Figure 1. Sex-Rep Sex-Role Classification by Sex-Consistency on Extremity Scores for Females.

## Appendix K

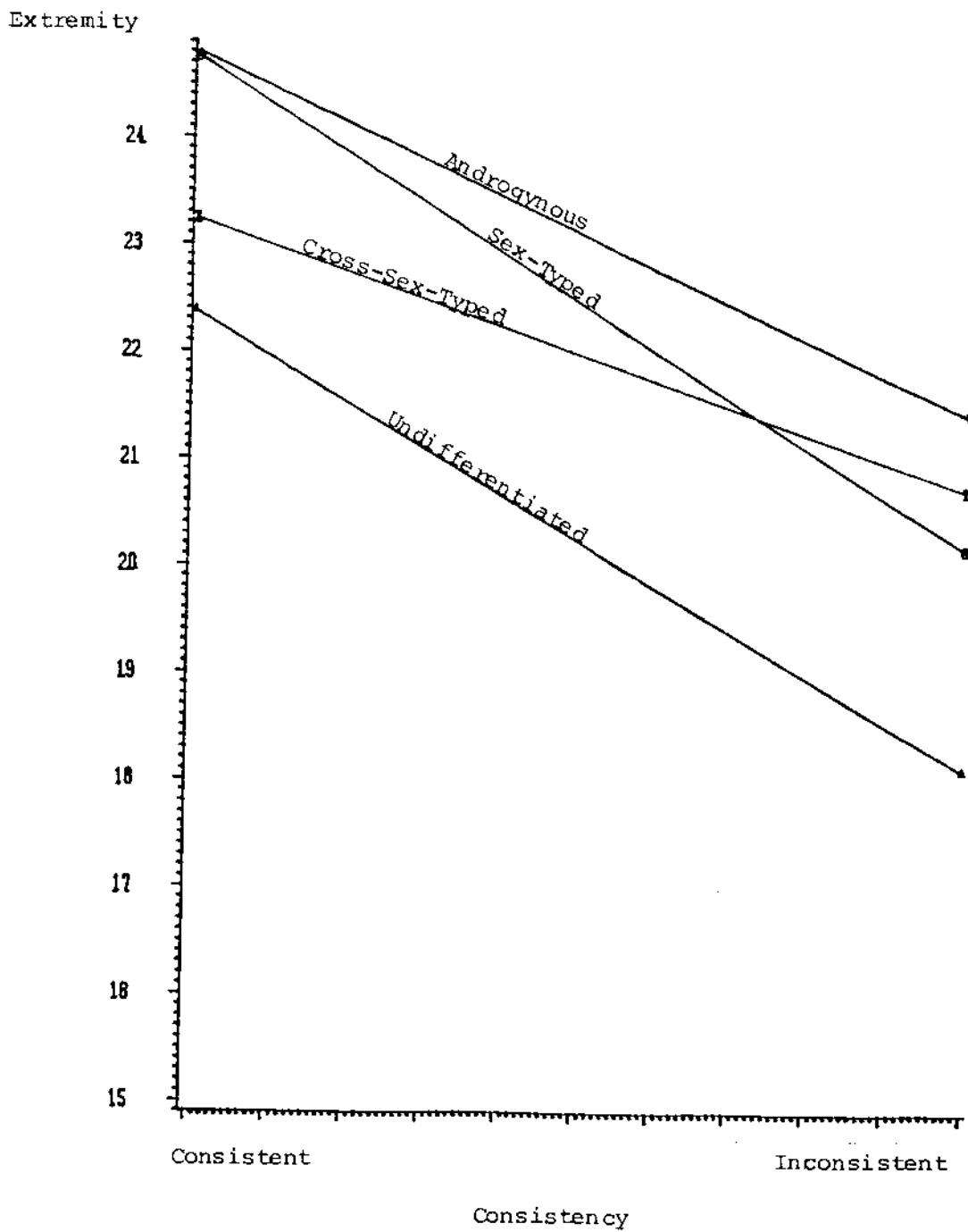


Figure 2. Sex-Rep Sex-Role Classification by Sex-Consistency on Extremity Scores for Males.

## Appendix L

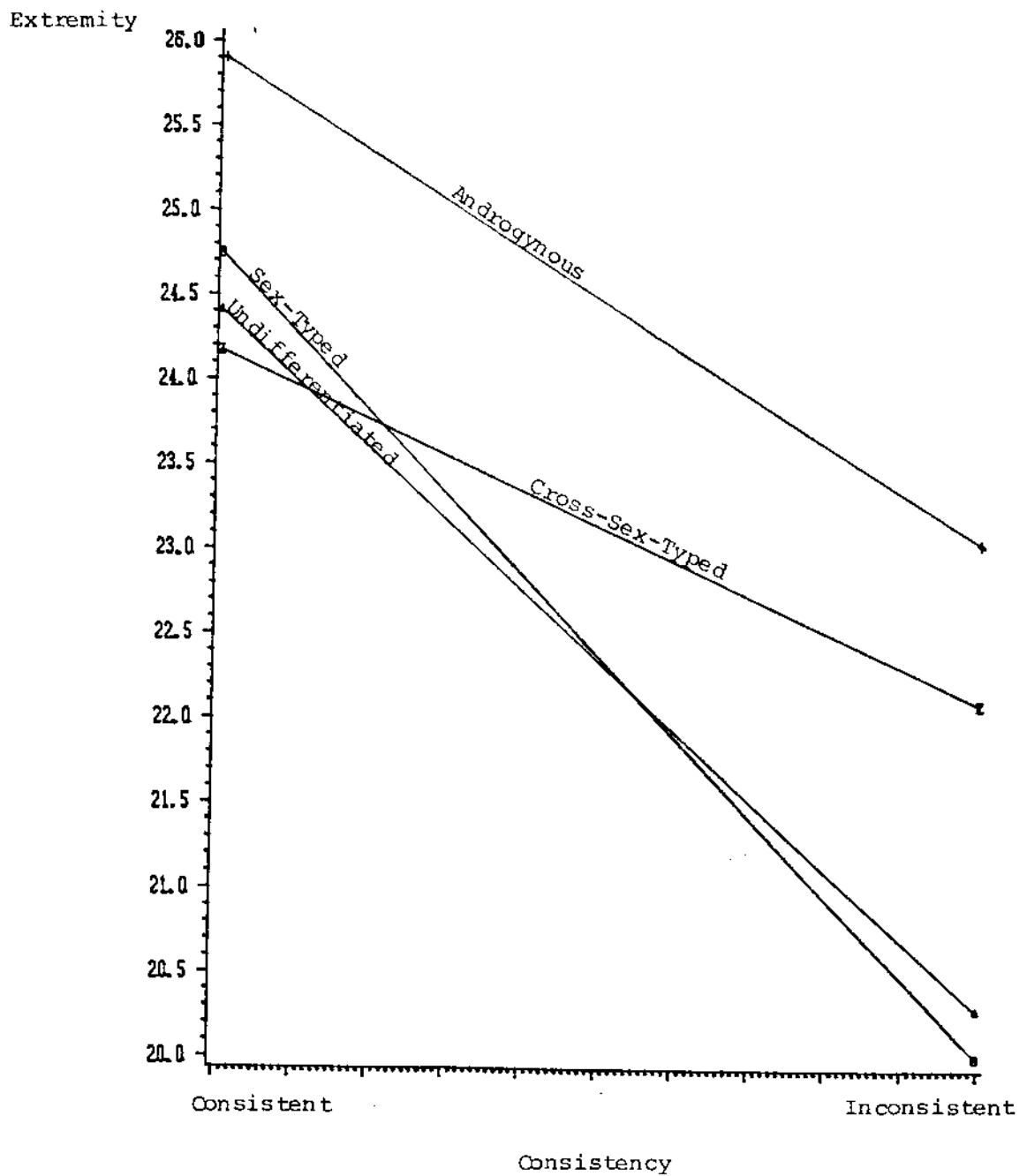


Figure 3. BSRI Sex-Role Classification by Sex-Consistency on Extremity Scores for Females.

## Appendix M

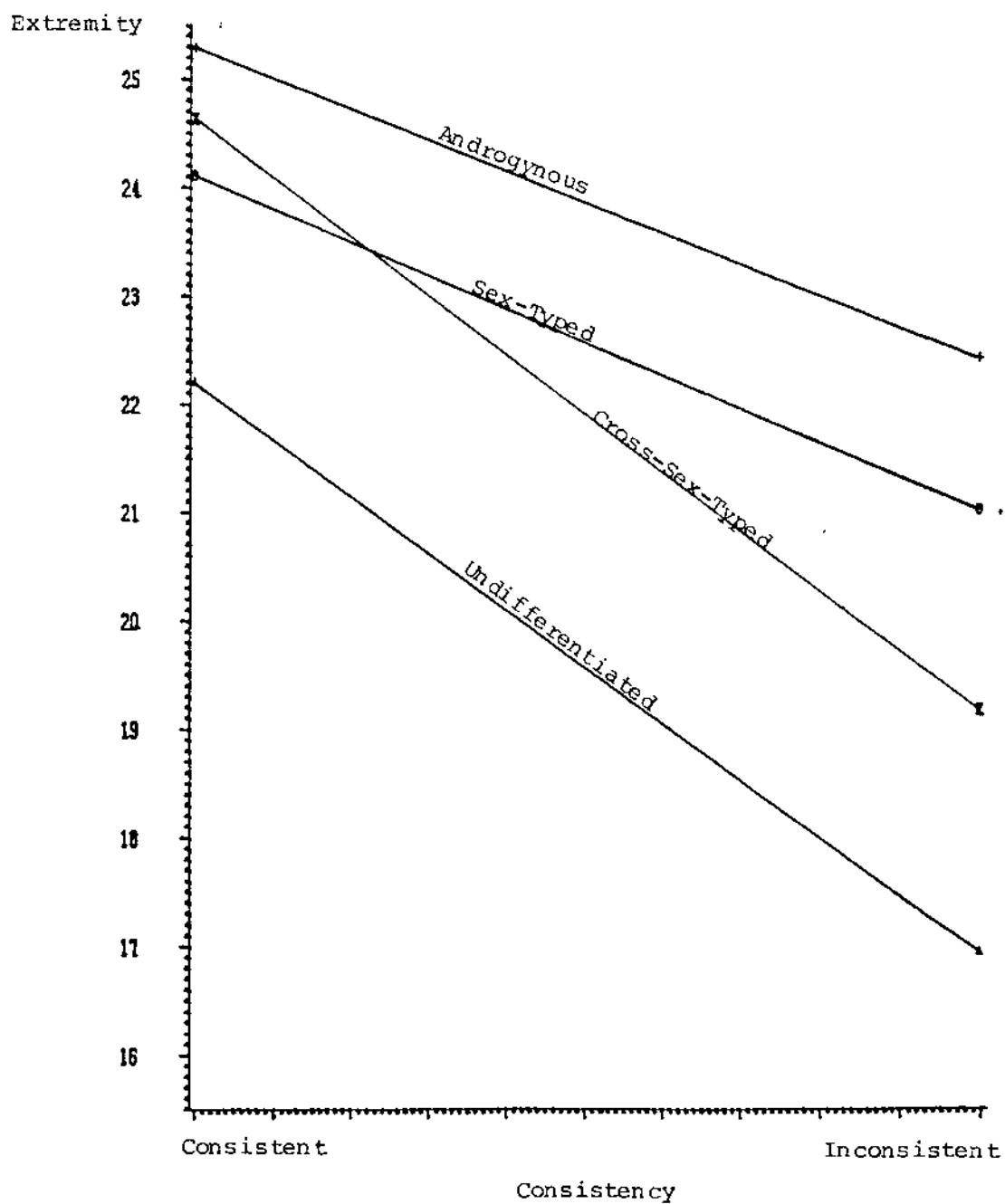


Figure 4. BSRI Sex-Role Classification by Sex-Consistency on Extremity Scores for Males.

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