# MASCULINITY-FEMININITY AS RELATED TO FAMILY-MARITAL ADJUSTMENT

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This is to certify that the

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ABSTRACT

MASCULINITY-FEMININITY AS RELATED TO
FAMILY-MARITAL ADJUSTMENT

By

David Richard Imig

The major purpose of this study was to investigate the relationship between the independent variable of masculinity-femininity (Mf) and the dependent variable of family-marital adjustment (F-MA) among married couples. A secondary objective of the study was to determine if the apparently changing sex role behaviors of males and females in contemporary society were reflected as changes in sex role related attitudes and interests.

The sample consisted of 181 couples who were student residents of MSU married housing. The sample was selected randomly from a representative population (University Village). Masculinity-femininity was measured using an adapted version of the Gough Femininity Scale. Family-Marital Adjustment was measured using an adapted, five choice, version of van der Veen's Family Concept Inventory. The Finn Multivariate Analysis of Mean Vectors program was used to analyze the major hypotheses. A test for differences of means was used to test the minor hypothesis.

The first major hypothesis postualted that knowledge of either spouse's Mf category would not be a significant indicator of either spouse's F-MA level was supported. However, the second major hypothesis stating that knowledge of both spouses Mf categories would be a significant

indicator of either spouses F-MA level was not supported. This implied that in the context of all married couples Mf was not a significant variable in considering the F-MA of spouses and families. A cursory examination of the F-MA cell means suggested that a most promising relationship appeared to exist when the wife's Mf level was related to the husband's F-MA level. It was felt that those marriages with children present did differ in some respects from those marriages without children. The same sample (N=181) was divided into two parts: those marriages with and without children. The previously utilized computer program was used to obtain univariate F values for the post hoc hypothesized relationships. The hypothesis directly relating the wife's Mf level with the husband's F-MA level was significantly supported at the .0358 level.

Questionnaire items having a significant Index of Discrimination value were combined to suggest individual and family traits that provided a somewhat less than complete, but informative characterization of the masculine female and the husband and family having low levels of F-MA.

The minor hypothesis investigated in this study was significantly supported. That is, the Mf means of both males and females in this study's sample did not differ significantly from the means obtained from a comparative sample compiled in 1957 (Gough, 1957). This suggests that if sex role related attitudes have not changed over a reasonable period of time, but sex role related behaviors have, that we are confronted with a behavioral phenomena similar to the acting out behavior commonly observed in adolescents. Acting out behavior results from the frustration experienced when an individual is treated

by others in a fashion inconsistent with the individual's self-perception (i.e., I am an adult, but others treat me as if I were a child. I am a confident, self-determining female, but others treat me as a passive, introverted female).

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Gough, H.G., Manual for the California Psychological Inventory, Palo Alto: Consulting Psychologists Press, 1957.

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By

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# CHAPTER I

# INTRODUCTION

## General Statement of the Problem

Marital adjustment, success or happiness, interpreted in the broadest sense, has been continually studied for the past forty years (Stephens, 1968). As noted in a review of marital research and conflict (Barry, 1970), most of the studies started with common sense assumptions rather than specific hypotheses derived from theory.

Most likely, this fact of research results directly from the glaring deficiency of conjugal theory in general and marital adjustment in particular. This discomfort with past and current attempts to explain and predict success or failure in marriage has been expressed by several writers (Bowman, 1956; Ryder, 1966; Lively, 1969). Several others, while professing a positive attitude toward marital adjustment measures and instruments, have failed to advance beyond a level at which they correlate numerous non-related variables with positive or negative degrees of marital adjustment. The above attitude was best described in an essay by Kirkpatrick (1955) on "Standards of Marital Success" (Winch, McGinnis, Barringer, 1962), in which he concludes:

> It might seem that such a subtle type of success in marriage is merely a complex ideal resulting from

> intellectualized wishful thinking. But given proper schedules, answered independently by husband and wife, yet interrelated, a rough measure of mutual personality adjustment might be achieved (p. 558).

Stephens (1968), in a review of predictors of Marital Adjustment, states:

> I would guess that no single predictor counts for very much; but that all the predictors, taken together, definitely count for something. The seventeen predictors, given alone could be useful as a checklist. Thus, for contemplated marriage: If the signs are unfavorable on only two of the predictors, this is very good, because it means that the signs are favorable with respect to the other fifteen. If, on the other hand, the prospective marriage rates bad on ten of the predictors, this is reason to pause (p. 128).

Considering Kirkpatrick's (1955) and Stephens' (1968) reviews, it seems apparent that little significant progress has been achieved in the last decade in the evolution of a systematically integrated marital success, adjustment, or happiness predictor. This is understandable, since a brief assessment of the seventeen predictors of marital adjustment (Stephens, 1968) revealed that the majority of variables highly to moderately correlated with marital adjustment are sociological factors. This includes factors such as age at marriage, premarital pregnancy, religiosity, social class, similarity of faith, level of education, and others.

A relatively recent study (Murstein and Glaudin, 1968) reflects the need for marital adjustment predictors of a different nature. In their study they posed the question:

> Are there personality types that predispose towards marital difficulty, or are the causes of marital unhappiness so myriad and complex that no study of an individual apart from the study of his spouse and environment, can shed any light on the cause of his marital difficulties? (p. 651)

Likewise, in a study previously mentioned, (Barry, 1970) the author presents a related perception when he states:

> The time is ripe for an effort to study marriage from the point of view of relationship or, better, of personality as basically a product of past relationship experience and a co-determiner of present relationship experience with positive or negative consequences for future relationship experiences (p.41).

This, then, indicates the need for expanded marital predictors which relate to personality determinants. These predictors considered in combination with sociological factors potentially form the basis of a marital adjustment model from which a related theoretical system might be developed.

When considering the development of the "expanded marital predictors," it is a logical query to consider what theoretical approach would provide the most beneficial basis for research. Tharp, in a review of psychological patterning in marriage, (Tharp, 1963) concludes by saying:

> Other reviewers might well abstract generalizations quite different from those presented here. Any analyst's eyes are focused by his own convictions, and the author's own might be made explicit here: role theory provides the best available framework for investigation of psychological phenomena in these issues -- issues of pressing, practical, ameliorative, and basic theoretical concern (p. 165).

Tharp's views are reflected in a study of personality and marital adjustment by researchers (Murstein and Glaudin, 1968) dealing with the use of the MMPI in the determination of marital adjustment. These authors determined that a factor called "Insensitive-Rigid" was found to be significant for both men and women. This factor, in both instances, is primarily defined by a positive L loading and a "masculine" Mf loading. It was so named because it suggested a personality type more competitive and obtuse than sensitive to feelings in a cooperative relationship. In their conclusion they state:

> The authors are thus confronted with the finding that claiming to act always in the "right" way and also rejecting

> "feminine" attitudes are associated with marital dissatisfaction for both sexes. It will take additional research to understand this interesting result, . . . (p. 655).

This research, when combined with Tharp's suggestion, strongly implies that potential research of a fruitful nature can be generated using role theory in general, and sex roles in particular, as a basis for marital related research.

An early review of research dealing with personality variables as related to marital adjustment (Burgess and Wallin, 1953) concluded that well-adjusted or happily marrieds are characterized as being emotionally stable, considerate of others, yielding, companionable, self-confident and emotionally dependent; while the maladjusted marrieds indicated the opposite characteristics.

Shortly afterward, Parsons and Bales (1955) presented a sophisticated treatment of sex roles as related to marriage. After researching family structure, Parsons (Parsons and Bales, 1955) states:

> If this general analysis is correct, then the most fundamental difference between the sexes in personality type is that, relative to the total culture as a whole, the masculine personality tends more to the predominance of instrumental interests, needs and functions, presumably in whatever social system both sexes are involved, while the feminine personality tends more to the primacy of expressive interests, needs and functions. We would expect, by and large, that other things being equal, men would assume more technical, executive and "judicial" roles, women more supportive, integrative and "tension-managing" roles (p. 101).

Careful scrutiny suggests that there is a relationship between those personality qualities Burgess and Wallin (1953) related to well-adjusted marrieds, and the sex-typed characteristics Parsons and Bales (1955) describe as being "masculine" and "feminine" personality traits. This relation suggests that perhaps it would be fruitful to

investigate the traits of sex types, i.e., "masculinity" and "femininity," if we are to attempt to understand individual sexuality, as represented by sex roles and types, which seemingly are an integral part of one's personality and apparently of critical importance to the marital relationship.

The purpose of this study is, therefore, to determine what relationships exist between masculinity-femininity and family-marital adjustment.

## Review of Related Literature

### Masculinity-Femininity (Mf)

Goodenough (1957), Hattwick (1937), Kagan (1964), Tyler (1951), and Watson (1959) indicate that males are generally expected to be more object-oriented, competent in physical activities, aggressive, achievement-oriented, independent and dominant; while females are more nuturant and person-oriented, more competent in verbal communication, more submissive, passive, dependent, emotional, polite, tactful, and neat. Given these characteristics for the two sexes, it is apparent that society has different expectations as to how males versus females should be perceived and treated.

It follows that if an individual is treated by society or the family as a male or female, then that individual will perceive the world and interact with others using those masculine and/or feminine traits to which they were socialized as their fundamental personality orientation. Kagan (1964) states that parents seem to discourage the characteristics of passivity, dependence and open displays of emotion in males. Sears, MacCoby and Levin (1957) propose that physical aggression appears to be tolerated in males. Brown (1958), Hartley (1959), Lynn (1961, 1962) agree that there seems to be greater social

pressure for males to conform to masculine standards than for girls to conform to feminine standards. Brown (1958) and Lynn (1959) feel that their studies indicate that female "tomboys" are more tolerated in our society than are male "sissies."

Finally, Kagan (1964) presents the notion that once the sex role has been acquired, it acts as an internal judge to whom decisions about the initiation of behavior or maintenance of an attitude are referred for self-evaluation. Perhaps it is an over-simplification to suggest that one's perceptions are dominated totally by sex role, but it would also be neglectful to discard this concept as having minimal influence in directing one's individual and interpersonal behaviors.

Hartley (1960) makes the point that numerous studies, Barry (1957), Brown (1958), and later, Seward (1964), have indicated that the popular belief that sex roles (Mf) are changing may be false. Their evidence is based on studies measuring the perceptions of children as related to sex role characteristics of peers. Hartley found that children perceived males as possessing traits of dominance, aggression, and independence, and females the traits of passivity, nuturance and affection. At first, one might question the relevance of reports based upon samples consisting of children. But it is interesting to note that the children most likely perceive the traits the adults do present, rather than the traits and characteristics that adults think they are presenting.

## Masculinity-Femininity (Mf) Scales

Scales measuring Mf are primarily found in questionnaire form requiring true-false, like-dislike or some similar response pattern. Most Mf scales seek one type of response from the female and a different one from the male. The items composing the various varieties of

instruments are supposed to reflect sex differences as related to varying content, such as attitudes, interests, emotional or fearful thoughts, etc.

The Terman-Miles Attitude Interest Analysis Test (Terman and Miles, 1936) and the Gough Femininity Scale (Gough, 1952, 1957) were specifically developed for the express purpose of differentiating between the sexes. The Strong Vocational Interest Blank (Strong, 1943) and the MMPI (Dahlstrom and Welsh, 1960) developed secondarily out of items which were originally used for diagnostic purposes. Several other instruments, the Guilford-Zimmerman Temperament Survey, and the Cattell 16 PF Scales were developed via factor analysis. The content of most Mf scales is based on certain assumptions about males as compared to females.

Roe (1956) suggests that men are usually more interested in scientific activities, mechanics, physical activities, and politics. Women, on the other hand, seemingly prefer literature, art, music, teaching, social and clerical work, and have a greater interest in people when compared to men.

An analysis of the Mf scores taken from the Terman-Miles scale indicates that there is a decreasing order of masculinity associated with the following occupations: sciences, business, social service, and the arts. The diversity of Mf scales, what they measure and how they measure for it, is reflected by the fact that the majority of the previously mentioned Mf scales correlate in the range of .30 to .73 indicates that Mf is not a single trait, but a multi-dimensional variable.

The selection of a particular Mf scale for research purposes is subject to numerous considerations:

(1) It must have established norms and thus be standardized in relation to the sample in the proposed research.

(2) It must measure those characteristics and traits relevant to the proposed research.

(3) It must be difficult for the respondent to fake, thus subtle in nature.

(4) The questions asked must minimize the chances of alienating or threatening the potential respondents if the rate of respondent refusal is to be minimized.

After sorting through the various Mf scales, three were selected for final consideration:

(1) The Terman-Miles Attitude Interest Analysis Test (Terman-Miles, 1936), as the authors indicated could be faked by sophisticated subjects who were aware of the research purposes.

(2) The MMPI (Dahlstrom and Welsh, 1960) was developed to aid in the identification of abnormal psychological states. However, a number of the items in the scale posed questions of a sexual nature -- a subject still considered personal to many prospective respondents.

(3) The Gough Femininity Scale (Gough, 1952, 1957) in contrast to the MMPI was developed for the express purpose of describing and measuring personality aspects of "normal" subjects (i.e., without psychiatric disturbance). More specifically, it focuses primarily on those characteristics which are important for social interaction and social living. The author (Gough, 1952, 1957) states that the scale has the asset of being difficult to fake since many of its items are subtle and do not manifest an obvious relationship to sex differences--a definite advantage in comparison to the Terman-Miles scale.

The previously mentioned Mf scales: Terman-Miles Attitude Interest Analysis Test (Terman and Miles, 1936), Gough Fe Scale (Gough, 1952), Strong Vocational Interest Blank (Strong, 1943), MMPI (Dahlstrom and Welsh, 1960), Guilford-Zimmerman (Guilford-Zimmerman, 1949), and the Cattell 16 PF Scales (Cattell, Saunders and Stice, 1957), are essentially scales constructed as a single bi-polar variable.

Several researchers have attempted to construct an instrument involving a second continuum (Carlson and Carlson, 1960; Hammes, 1963; Kuethe and Stricker, 1963; MacBrayer, 1960; Steinmann, 1958, and Jenkin and Vroegh, 1969). The last study by Jenkin and Vroegh probably best characterizes the emphasis of this approach to the study of Mf. Their study (Jenkin and Vroegh, 1969) questioned the contemporary social consensus of Mf as a single bi-polar scale, with masculinity and femininity as the extremes. They proposed that masculinity has reference only to males and femininity only to females. The masculine traits appear to vary between an individual who is strong, confident, energetic, ambitious, personable and courteous and one who is emotionally unstable, insecure, cowardly, immature, whiny, and affected. Femininity varies between a female exhibiting affectionate, charming, graceful, sociable, understanding, thoughtful and good-natured traits, as compared to one who is argumentative, arrogant, crude, coarse, and hard. They conclude their studies by indicating that the concepts of masculinity and femininity are essentially the same for both males and females. They further state that:

> It is our contention that gender is not a sufficient criterion for selecting groups for the study of the nature of masculinity and femininity (p. 696).

Seemingly, the authors (Jenkin and Vroegh, 1969) allude to the notion that masculinity and femininity are characteristics greater

than maleness and femaleness; that it is futile to characterize males and females in relation to descriptive sex related traits, but perhaps fruitful to consider individuals as unisexed -- dealing with personalities in general and not sexes in particular.

As confusing as the various masculinity and femininity scales seem to appear, the rationale for this situation is quite logical. The researchers simply have their individual perceptions of what constitutes masculinity-femininity and their attitudes must be reflected in their studies.

After consideration of the criteria discussed here, this researcher chose to adapt the Gough Femininity Scale for use in this study. The adaptation of the Gough Fe Scale was minimal. Administration of the entire CPI was not feasible, therefore only the significant items comprising the Fe scale were included. Non-significant items were symmetrically placed among the significant items so that response patterning could be determined (See Appendix C).

The Gough Fe Scale (Mf)

The Gough (Fe) Scale has standard scores based on more than 6,000 male and 7,000 female respondents representing a wide range of socio-economic and geographical areas. However, Gough disclaims having a true random sample of the general population, as the majority of cases have been high school and college students. The purpose of the Scale was to differentiate between normal males and females (i.e., without psychiatric disturbance). More specifically, the Gough Fe Scale focuses on personality characteristics which are important for social living and social interaction.

The reliability of the scale has been studied by the use of the test-retest method. A group of 200 male prisoners was retested from

one to three weeks later, resulting in a stability coefficient of .73. A group of 101 high school males and 125 high school females repeated the test one year after the start of their junior year. The reliability for the males was .59 and for the females, .65. Point-biserial correlations of .78 and .65 were obtained on a high school group of 3,572 males and 4,056 females, and a college group of 787 males and 803 females, respectively.

The scale is comprised of 38 items. Higher scores indicate a greater degree of femininity in the subject. The mean score for males is 17.0 and for females is 22.5. Gough indicates that high scores are interpreted as possessing the following characteristics: patient, appreciative, helpful, gentle, having moderation, being persevering, sincere, respectful and accepting of others, and behaving in a conscientious and sympathetic manner. While low scores may be interpreted as one exhibiting traits such as ambition, hardheadedness, being outgoing, active, physically masculine, robust, restless, manipulative and opportunistic in dealings with others, blunt and direct in thinking and action, impatient with delay, indecision and reflection.

## Research Related to Marital Adjustment, Satisfaction and Happiness

Marital adjustment and mate selection is grossly divided into two theoretical approaches. One group of theories proposes that marital selection and/or adjustment is based on similarity of needs or traits. Burgess and Wallin (1953) found no negative correlations among their measures and, therefore, supported the Theory of Similarity. The second theoretical approach supports the opposite position and purports that adjustment and attraction is based on the partners complementing each other's needs.

Various studies since have substantiated or rejected both positions. Katz (1960) found more significant correlations for like needs, especially for women. He concluded that for wives, complementarity of needs was not generally related to marital satisfaction.

Tharp (1963) states that homogamy in cultural, social and personality associated variables is a basic norm in mate selection. He also notes that a large number of correlations have been formed between marital adjustment and congruence of self report and mate image. That is to say, a person who perceives his spouse as similar to himself will tend to be more happily married than one who perceives his spouse as different from himself. Hurley and Silvert (1966) present data substantiating Tharp's point of view.

Winch (1958) states that complementarity may occur in either or both of two ways: (a) two persons showing different intensities of the same need; (b) two persons showing positive or negative correlations of intensity on two different, but theoretically complementary needs. He proposed that although interests and attitudes would show similarity in marriage relationships, the more fundamental variables of motivation needs, for example, would reveal patterns of complementarity. Bermann and Miller's (1967) work concerning roommate choices indicates that stable relationships point to need complementarity whereas unstable relationships do not.

Combs (1966) proposed a middle-level theory suggesting (a) that persons with similar backgrounds learn similar values, (b) that interaction between such persons is mutually rewarding since they share a universe of discourse which fosters communications and understanding with a minimum of tension and ego threat, (c) that these rewards leave a feeling of satisfaction with the partner and a desire to continue

the relationship whence homophily and homogamy follow. Earlier studies by Kirkpatrick and Hobart (1954), Udry, Nelson and Nelson (1961), and Kerckhoff and Davis (1962) seemingly explain this approach.

A longitudinal study by Uhr (1957), using Kelly's (1955) data, suggests that it is the husband's personality traits which are more strongly related to later happiness in marriage than are the wife's.

Corsini (1956-b) suggests that he found a relevant correlation between marital happiness and a culturally shared conception of what a husband should be. Likewise, Tharp (1963) reviewed the studies of Cymond (1954), Corsini (1956-a, 1956-b) and Luckey (1960-a, 1960-b) using interpersonal perception as the major criteria. He found that marital happiness relates to the culturally accepted definitions of what a good husband ought to be. Kotlar (1965) elaborates upon this generalization by stating that the important factor may not be congruence of perception, but the motivation to perceive the husband as above average in fulfilling his marital role.

Throughout many of the studies reviewed concerning marital adjustment, success or happiness, a pattern seems to emerge pointing to the husband as being a critical factor in marital adjustment. Barry (1970), in a review of marriage research and conflict suggests:

> it would appear that a solid male identification, established through affectional ties with the father, and buttressed by academic and/or occupational success and the esteem of his wife is strongly related to happiness in the marriage (p. 47).

A study by Murstein and Glaudin (1968) apparently reports semi-contradictory results with those of Barry (1970). They found significant results for the Mf scale of the MMPI as correlated to marital adjustment (Locke-Wallace) for both men and women. They state that they are:

> confronted with the finding that claiming to act always in the right way [masculinity traits] and also rejecting feminine attitudes are associated with marital dissatisfaction (p. 655).

They conclude by indicating that both males and females scoring "high" masculinity are more apt to be associated with low marital adjustment. Murstein and Glaudin, in the same study, utilized an objective checklist (Interpersonal Check List - ICL) concerned with perceptual sets such as self, ideal-self, spouse, ideal-spouse, etc. These data suggested similar results for women, but not for men.

A comparison of Barry's (1970) previous statements concerning solid male identification and Murstein and Glaudin's (1968) study, as mentioned above, point to the need to determine just how solid is solid. It is this researcher's feeling that many behavioral scientists fail to quantify their conclusions, even within gross ranges. The term solid is somewhat arbitrary when attempting to relate it to reality.

## Measurement of Marital Adjustment, Success, or Happiness

Measuring the quality of marital interaction is a complex problem. There is much confusion concerning the differential meanings and measurement of terms such as marital adjustment, happiness, success or satisfaction. Likewise, it is necessary to consider the items comprising the instruments being considered. Terman (1938) purports to measure marital happiness. Locke (1951) indicates marital adjustment and Karlsson (1951) measures marital satisfaction; while Burgess, Locke and Thomes (1963) consider eight different criteria in their index of marital success.

Van der Veen (1964) constructed a Family Concept Q-sort consisting of eighty items. Originally it was used as an indirect method of

measuring marital adjustment (van der Veen and Ostrander, 1965). Since then it has been revised in a true-false and strongly agree to strongly disagree forms capable of measuring marital adjustment in a slightly more direct manner.

Murstein and Glaudin (1966) propose that their Interpersonal Check List (ICL) is highly related to marital adjustment. They use perceptual sets such as self, ideal-self, spouse, ideal-spouse, etc. Dunn (1963) uses role expectation in marriage as a measurement of marital happiness as well as a device for initiating group discussion.

Udry (1966) indicates that most marital measurement techniques of a paper and pencil form utilize a very traditional orientation. He suggests that if one goes to church, agrees with their spouse in order to avoid conflict, kisses them regularly, and settles arguments by compromise, one will obtain a good marital adjustment score.

Kirkpatrick (1955) indicates the premarital and marital factors which he found to have favorable effect on and in marriage. Premarital factors indicated are (a) parents measure high marital happiness, (b) personal childhood happiness is high, (c) mild, but firm parents, (d) acquainted with spouse over one year before marriage, (e) approval of parents, and (f) reasons for marriage were based on love and commonality of interests. Several marital factors are (a) pair equalitarianism, (b) desire for children, (c) good relations with in-laws while not living with them, and (d) interest in the community.

Barry (1970) in his review of research and conflict in marriage indicates self-reported happiness has its pitfalls, as it suffers from such factors as "halo" effects related to satisfaction with self, job and other factors besides the marital relationship.

Certainly no marital measurement instrument is without fault. However, steps can be taken to minimize the deficiences: Measures such as separate administration of the instrument of spouses to reduce the possibility of collusion; the addition of non-significant questions in an equally spaced manner to check for the presence of a "halo" effect; a masking of the test items to minimize the ability of subjects to fake responses, and the addition of a factor not generally reflected in many MA instruments which is the relationship of the husband and/or wife to other family members.

Virginia Satir (1964) indicates that often in dysfunctional families, the family members chose one person to be labeled as the "identified patient." The husband and wife may have a "functional" relationship, but place all the blame on the "sick" family member. This would suggest a need for an instrument that purports to measure family adjustment, which includes, but is greater than marital adjustment. This added criteria substantially reduces the number of potential instruments one can utilize. One also should consider the reference groups used to establish norms for particualr instruments.

A general review of most MA instruments reveals that the persons considered as having low marital adjustment, satisfaction, happiness or success are individuals seriously considering or having concluded divorce. Certainly a "good" MA test should be capable of perceiving indications of marital or family dysfunctions in a manner considerably less direct than those used with couples at such a disintegrated level.

Using the Satir concept of family dysfunctionality we can suggest that those families seeking marital, family or child counseling would provide additional criteria for the establishment of norms for MA or Family Adjustment (FA) instruments.

Family Concept Inventory (FCI)

Originally van der Veen, et.al.(1964) constructed a Q sort containing 80 items, 48 of which entered into the scoring. He reported significantly different mean scores for well-adjusted and maladjusted families (35.2 and 27.9 respectively; N=20). Van der Veen, et.al. (1964) reported a correlation between the Locke-Wallace and the Q sort of r= .67 with N=40. Hofman (1966) administered to a sample of 25 couples the Q sort and the significant 48 items in a true-false form. He reported a correlation of .72 between these two forms, and an internal consistency index of .84 for the true-false form. Palonen (1966) developed a five-choice form, strongly agree to strongly disagree, using the significant 48 items found in the original Q sort. The subjects were asked to respond to each item using one of the five possible choices, after which a weight of 0 to 4 was assigned to each response. Using this procedure a total score may be obtained for each spouse or family member. Palonen (1966) reported a split-half reliability of .85 (N=80). Updyke (1968) reported means for individual spouses of 154.9 for females and approximately five points lower for males (N=99) using the five choice FCI. Hofman's (1969) research comparing clinical versus non-clinical families reported the following means for the FCI (N=15):

TABLE 1. FCI Means of Clinical and Non-Clinical Families

| | Clinical | Non-Clinical |
|---|---|---|
| Average | 126.0 | 154.6 |
| Male | 128.3 | 153.1 |
| Female | 123.8 | 156.1 |

The non-clinical families were described and thus selected, for their visibly maximal level of marital and family adjustment, by clergy, family and marriage professionals. The clinical families were chosen because they applied for counseling assistance at a mental health facility.

Van der Veen, et.al. (1964) characterized families having low Q sort scores (M=27.9) as considering divorce, separation, or leaving home, failure of one or more spouses to perform their role obligations, problem ridden, poor interpersonal relations between spouses, and general instability. High scores (M=35.2) are defined as the opposite of low scores.

The review of literature indicates that most research is instrument specific, more so for Mf than for F-MA. The choice of instruments is predicated upon the objectives of the proposed research, the traits each instrument purports to measure, the nature of the sample, and the statistical validity and reliability of the instruments. In light of these and previous considerations, it was concluded that adapted versions of the Gough Fe Scale and van der Veen's FCI would best serve as tools in attempting to investigate the objectives of this study.

# CHAPTER II

# STATEMENT OF THE PROBLEM

## Purpose and Objectives of Study

The primary purpose of this study was to investigate relationships between the self-reported variables of Masculinity-femininity (Mf) and Family-Marital Adjustment (F-MA) of spouses and couples. Mf was measured by an adapted version of the Gough Femininity Scale. F-MA was measured using the five choice version of the Family Concept Inventory. Scores were obtained by individual administration of the instruments to spouses. The population of the study was married students living in university married housing units. Selection procedures permit generalization to the couples included in the sample, and to couples similar to the sample respondents.

The specific objectives of this study were to investigate measured Mf and F-MA:

### Major Objectives

1. To determine relationships between Mf and F-MA.

2. To determine if spouses with particular pairing categories of Mf reflect significantly different levels of F-MA.

### Minor Objective

3. To determine if the statistical means of Mf for males and females differ significantly from those norms previously established by the Gough Fe Scale.

## Research Hypotheses Investigated

### Major Hypotheses

1. That husband's or wife's Mf levels considered separately will be non-significant predictors of either spouse's F-MA level.

2. That particular interactional relationships (pairing factors) between the husband's and wife's Mf levels will be significant predictors of either spouse's F-MA level.

### Minor Hypothesis

3. That the Mf means of males and females in this sample will not differ significantly from the previously established norms.

### Assumptions

1. In this study the terms marital adjustment, happiness, success, and satisfaction in marriage will be considered synonomous.

2. University Village is representative of all Michigan State University student married housing units, since students are randomly assigned to apartments.

3. The sample is a representative cross-section of married university students, selected randomly without replacement.

4. Interviewers were randomly assigned to potential respondants.

5. Interviewers had minimal influence on the participant's responses.

6. Sex role is a significant facet of the individual's total personality.

7. That positive family-marital adjustment contributes to the survival of the social institution of the family.

8. The husband-wife unit will be considered to be a family.

## Operational Definitions of Terms

### Masculinity

Pertaining to those qualities of, or suitable for, a male, such as outgoing, hardheaded, ambitious, physically masculine, active, robust, restless, manipulative and opportunisitc in dealings with others, blunt and direct in thinking and action, impatient with delay, indecision and reflection (Gough, 1952).

Operationally, this term is defined as low femininity scores, as measured by the adapted version of the Gough Fe Scale, having a magnitude of 14 or less for males and 21 or less for females. The lower the score, the more intensely are the described characteristics manifested. Individuals having scores in this range were statistically categorized as having an Mf level of 3, or low (L).

### Femininity

Pertaining to those qualities of, or suitable for, a female such as patient, appreciative, helpful, gentle, having moderation, being persevering, sincere, respectful and accepting of others and behaving in a conscientious and sympathetic manner (Gough, 1952).

Operationally this term is defined as high femininity scores, as measured by the adapted version of the Gough Fe Scale, having a magnitude of 19 or greater for males and 25 or greater for females. The higher the score, the more intensely are the described characteristics manifested. Individuals having scores in this range were statistically categorized as having an Mf level of 1, or high (H).

Equalitarian

This term applies to individuals who are neither totally masculine nor totally feminine. For both sexes this term is defined as an individual manifesting middle levels of the semantic differential work groups, or pairs shown in Figure 1. An equalitarian individual would manifest a flexible nature in relation to the traits described, being neither totally active nor totally passive, but manifesting traits of restricted activity or minimized passivity. The other semantic differential groupings should be interpreted in a like manner.

Operationally this term is defined as medium femininity scores, as measured by the adapted version of the Gough Fe Scale, having a magnitude of 15-18 for males and 22-24 for females. Individuals having scores in this range were statistically categorized as having an Mf level of 2, or Medium (M).

FIGURE 1. Bi-Polar Mf Scale

| MASCULINE | EQUALITARIAN | FEMININE |
|---|---|---|
| Outgoing (extroverted) | ⟷ | Inward (introverted) |
| Hardheaded, stubborn, rigid | ⟷ | Gullable, pliable |
| Ambitious, restless | ⟷ | Content, persevering |
| Active | ⟷ | Passive |
| Blunt and direct in thinking and manner | ⟷ | Gentle and behaving in a conscientious and sympathetic manner |
| Impatient with delay, indecision and reflection | ⟷ | Patient and accepting of others, reflects upon decisions |
| Manipulative and opportunistic in dealings with others | ⟷ | Sincere and respectful |

Family-Marital Adjustment (F-MA)

The terms adjustment, success, happiness and satisfaction will be assumed to be synonomous for this study. The term adjustment will be considered to be representative of the group of similar words previously mentioned.

For this particular study it was necessary that both spouses be present in the household. The Family Concept Inventory (FCI) expands upon the limited perception of marital relations to include other family members in the questionnaire. Thus, the FCI serves as both an instrument for the measurement of marital adjustment and family adjustment.

For this study, Family-Marital Adjustment (F-MA) is defined as the state of mutual harmony, consideration, and cooperation between family members, extra-familiar harmony as reflected via community and friendship involvement, to exhibit the ability to overcome whatever difficulties they encounter, and to seem themselves as the masters of their own fate. Families with low or clinical levels of adjustment are characterized by divorce, separation or leaving home, failure of one or more spouses to perform their role obligations, problem-ridden, poor interpersonal relations between spouses and family members, and general instability. High scores are characterized by traits opposite of low scores (van der Veen, et.al., 1964). Low scoring families will be considered to be clinical-type families. The norms of the FCI, as related to low scores, were established using families that requested mental, marital or family counseling or assistance (Hofman, 1969).

Operationally, as measured by the five choice version of the Family Concept Inventory (FCI), low or clinical scores for this study are defined as having a range of 132 or less for males, and 128 or less for females. While high or non-clinical scores for males have a range of 149-192, and for females a range of 151-192.

# CHAPTER III

# METHODOLOGICAL DESIGN OF STUDY

## Sampling

### Definition of Population

The population for this study consisted of all married students living in Michigan State University on-campus married housing units. To live in university married housing one spouse must be an MSU student of either graduate or undergraduate status. The nature of the research demanded that only families with spouses living together were acceptable as potential participants. One-parent families were rejected as inappropriate as were foreign-born families. However, *a priori* determination of those subjects within the population was virtually impossible due to the insufficient information available to this researcher. Likewise, it was difficult to select foreign-born from American-born families using their last name as the primary criteria.

Married university students were selected for participation in this study because of the emerging concern within the university community for the problems and needs of the married student living in university housing. This researcher has a personal concern for these students because of his involvement as a member of an interdisciplinary Married Student Services Committee. Also, the married student population was that group most readily available for study. Other diverse populations were considered for study, but inclusion

of such samples would have necessitated considerable expense for which funds or grants were not immediately available.

Selection of Sample

University student married housing consists of three major housing complexes. Information obtained from the University Married Housing Office suggested there was no reason to assume that one complex differed from the other in any significant manner, as students are assigned housing on a first-come, first-served basis. University Village was selected as representative of the University married housing units, because of its accessibility and operational size. Likewise, there was no reason to assume that any one apartment building differed significantly from any other. Because of the number of interviewers available, and the nature of their involvement, it was determined to randomly select, without replacement, 30 buildings from the total of 42 apartment buildings that comprise University Village. Of the ten to twelve apartments in each building, the first nine apartments were included in the proposed sample, making a total of 270 apartments. The first nine apartments were chosen, because each building was given a certain number by the University, and each apartment was given a specific letter; thus, if a building consisted of ten apartments they would be numbered 5555A, 5555B, 5555C, etc. However, a pre-study investigation indicated that several of the twelve apartment buildings did not have consecutively lettered apartments for the 10th, 11th, and 12th apartments. As no further information was available as to why the inconsistency in apartment number designation, it was decided to purposely select the first nine apartments in each randomly selected apartment building.

Characteristics of Sample

The husbands ranged in age from 19 to 48, with a mean age of 24.78 years (s.d. = 4.40). Wifes ranged in age from 18 to 50 years, with a mean of 23.52 years (s.d. - 4.14). Length of marriage ranged from four months to 29 years, although the next longest marriage was 11 years. The average years married was 2.09 (s.d. = 2.18). Of the 181 couples, 120 were childless, while the remaining 61 couples had 80 children (1.3 children per family).

The following table indicates the number of couples married for various lengths of time, with the number of couples, with and without children represented. The simple correlation for years married and number of children is .66.

TABLE 2. Married Housing Students With And Without Children

| Number of Years Married | Number of Couples | Number of Couples | |
|---|---|---|---|
| | | Without Children | With Children |
| Less than 6 months | 8 | 8 | 0 |
| 6 months - 1 year | 30 | 28 | 2 |
| 1 year - 2 years | 61 | 48 | 13 |
| 2 years- 3 years | 32 | 22 | 10 |
| 3 years- 4 years | 11 | 4 | 7 |
| 4 years- 5 years | 13 | 7 | 6 |
| 5 years- 6 years | 11 | 3 | 8 |
| 6 years- 7 years | 5 | 0 | 5 |
| 7 years- 8 years | 3 | 0 | 3 |
| 8 years- 9 years | 1 | 0 | 1 |
| 9 years-10 years | 2 | 0 | 2 |
| 10 years or more | 4 | 0 | 4 |

Of the responding families (N=181), the husband is the only student in 103, the wife is the only student in ten, and in 68 families both the husband and wife were students.

One-hundred-seventy-one husbands were students (102 graduate and 69 undergraduate) and 78 wives were students (25 graduate and 53 undergraduate). Only ten husbands were non-students (9 worked and one non-worker) while 103 wives were non-students (70 worked and 33 non-workers). Of the 70 non-student, working wives, 49 had no children, as compared to the 33 non-student, non-working wives, 24 of whom have one or more children. The chart below summarizes the data for wives, students, non-students, work, non-work, with and without children.

FIGURE 2. Data for Wives Living in University Married Housing Units

WIVES (181)

| NON-STUDENTS (103 - 56.9%) | | STUDENTS (78 - 43.1%) | |
|---|---|---|---|
| Work (70) | | UG-Work (81) | |
| No Children | (49) | No Children | (8) |
| Children | (21) | Children | (0) |
| Non-Work (33) | | UG-Non-Work (45) | |
| No Children | (09) | No Children | (34) |
| Children | (24) | Children | (11) |
| | | G-Work (10) | |
| | | No Children | (8) |
| | | Children | (2) |
| | | G-Non-Work (15) | |
| | | No Children | (12) |
| | | Children | (3) |

Approximately 80 per cent of the wives who are graduate and undergraduate students were childless. Of the non-student working wives, 70 per cent were childless, as compared to only 27 per cent of the non-working wives who were childless.

The mean F-MA score, as measured by the adapted version of the FCI was 142.97 for wives (s.d.=21.59) with the lowest score 64 and the highest score 186. For husbands their F-MA scores ranged from 82 to 183 with the mean being 137.92 (s.d.=18.27).

The mean Mf score for husbands, as measured by the adapted version of the Gough Fe Scale, was 16.54 (s.d.=3.04) and for wives was 23.27 (s.d.=2.86). The range of Mf scores for wives was 15-32 and for husbands was 8-29. A detailed breakdown of the background factors on the families is included in Appendix E.

## Data Collection Procedure

### Initial Contact

The 270 potential participants were initially sent a cover letter explaining the general nature of their desired participation (see Appendix I). Individual contact via telephone was considered, but rejected as information relating name, phone number and apartment location, for the sample, was not available in a usable systematic manner.

### Interviewers

Undergraduate students, enrolled in a Family-Human Development course engaging in a student-family interaction project comprised the body of interviewers. Ninety students consented to act as interviewers for the study. Interviewers were randomly assigned three apartments. The apartments were located within the same building so that the interviewers efforts would be maximized.

Interviewers were trained in the following manner:

1. To maximize participant response in initial face-to-face contact, each interviewer had previously received and reviewed a copy of the cover letter sent to the potential participants (See Appendix A). This was done in an attempt to standardize the interviewers' responses to subjects' questions during the initial face-to-face contact.

2. All interviewers were trained in the technique of administrating self-report questionnaires of the nature to be used. Interviewers were instructed to avoid interpreting questions for the respondant to allow for individual interpretation.

3. To insure individuality of response by the participants, the interviewers were instructed not to leave questionnaires in the household to be finished at a later date, and each respondant was asked not to communicate (verbally or non-verbally) with their spouse when completing the questionnaires so that potential collusion between spouses responses would be minimal.

4. Special emphasis was placed on the minimization of interviewer-interviewee interaction before the respondants completed the questionnaires so that any interviewer influence upon the respondant would be substantially reduced.

5. If the family refused to cooperate, the interviewer attempted to elicit reasons for refusal. In either case (if the subjects did cooperate in the study), the individuals were thanked for their cooperation, however minimal.

## Responding Sample

Of the 270 potential respondants, 181 participated in the study. Twenty-seven of the 89 non-participants declined involvement in the

study for personal reasons. It was generally the husband who was non-cooperative. Thirty-four families could not be contacted even though every interviewer attempted at least three and as many as seven contacts. Seventeen families were omitted from the study because they were either foreign-born (12) or one-parent families (5). Eleven apartments either didn't exist or were vacant.

### Interviewer Effects

The project was designed so that interviewer influence would be minimal. It is doubtful that the refusal rate could have been substantially reduced by using fewer more highly trained interviewers. Fellow students most likely were received more readily than professionals. There is very little reason to believe that other interviewers could have initiated more successful contacts without significantly more experience and training

## Research Design and Analysis

### Design

The major hypotheses of this study will be tested by a two-way, fixed effects design incorporating multivariate analysis of variance. The two independent variables are the husband's and wife's Mf scores as measured individually by the adapted version of the Gough Fe Scale. Both spouses Mf scores will be assigned to categories appropriate for males and females. The limits for each category were in part determined by the design requirement that each cell have at least five to ten observations minimally. Upon inspection of the frequency distribution of Mf scores, it was decided to have three major categorizations (high, medium and low) for males and females (husbands and wives). The numerical limits were determined by attempting to

obtain a 25%-50%-25% (high-medium-low) grouping of the subjects so that each cell could have at least five observations.

FIGURE 3. Number of Observations Per Cell

| Wives Mf levels | | High(1) 38-19 | Med(2) 18-15 | Low(3) 14-0 | Observations per Row | Percentages per Row |
|---|---|---|---|---|---|---|
| Category Raw Score limits | High(1) 38-25 | 14 | 33 | 9 | 56 | 31% |
| Category Raw Score limits | Med (2) 24-22 | 23 | 39 | 23 | 85 | 47% |
| Category Raw Score limits | Low (3) 21-0 | 6 | 27 | 7 | 40 | 22% |
| Observations per column | | 43 | 99 | 39 | N = 181 | |
| Percentages per column | | 24% | 54% | 22% | | |

FIGURE 4. Low to High Scores Obtained From the Gough Fe Scale

| | Raw Scores | Category |
|---|---|---|
| High Fe Scores (Feminine) | (38-19 Husbands) _____ | (High or 1) |
| | (38-25 Wives) _____ | (High or 1) |
| Medium Fe Scores (Equalitarian) | (18-15 Husbands _____ | (Medium or 2) |
| | (24-22 Wives) _____ | (Medium or 2) |
| Low Fe Scores (Masculine) | (14- 0 Husbands) _____ | (Low or 3) |
| | (21- 0 Wives) _____ | (Low or 3) |

To have expanded the number of categories from three to five (High, Medium High, Medium, Medium Low, Low) would have increased the total number of cells to 25 for which a much larger sample of observations would have been necessary.

The total design requires the calculation of cell means for F-MA scores for husband and wife separately. Thus, the couples are nested within each cell. Table 3 represents the statistical design.

TABLE 3. Diagramatic Representation of Statistical Design for Testing of Major Hypotheses

| Husbands Mf Category | Wives Mf Category | Number of Couples Nested | Husbands F-MA Score (Mean) | Wives F-MA Score (Mean) |
|---|---|---|---|---|
| 1 | 1 | 14 | 136.71 | 141.36 |
| 1 | 2 | 23 | 135.74 | 139.13 |
| 1 | 3 | 6 | 129.00 | 137.50 |
| 2 | 1 | 33 | 140.88 | 145.58 |
| 2 | 2 | 39 | 140.26 | 144.21 |
| 2 | 3 | 27 | 137.52 | 146.56 |
| 3 | 1 | 9 | 136.78 | 137.78 |
| 3 | 2 | 23 | 138.39 | 142.30 |
| 3 | 3 | 7 | 129.57 | 139.20 |

The two dependent variables of husbands and wives family-marital adjustment scores were measured by the five-choice version of the Family Concept Inventory (Palonen, 1966).

The five choice version of the FCI was chosen by this researcher for the following reasons: (1) allowed respondents a greater variety of responses (five) than many instruments; (2) it purports to measure a concept which includes and is greater than marital adjustment, namely family adjustment; (3) items are less direct, and thus appear to be less threatening, than comparative instruments, such as the Locke-Wallace Marital Adjustment Test.

All hypotheses and conclusions in this study are instrument specific. Any terms, such as Mf, masculinity, femininity or equalitarian refer specifically to those scores as derived from and measured by the adapted version of the Gough Fe Scale. Likewise,

the terms MA, F-MA, marital adjustment, family-marital adjustment, and family adjustment are derived from the adapted version of the Family Concept Inventory.

## Analysis

The major portion of the data analysis is concerned with testing the relationship between Mf and F-MA. The analysis of the indicated relationship will be accomplished using the F-RATIO FOR MULTIVARIATE TEST OF EQUALITY OF MEAN VECTORS. The F-ratio used is similar to the F-ratio obtained from an analysis of variance table (where $F = \frac{MS_A}{MS_e}$), but not identical to it.

The multivariate aspect of the analysis is derived from the multiple (two) dependent factors - the husband's and wife's F-MA scores. This analysis of variance tests the main hypothesis for over-all significance, and then step-down F-ratios are calculated to determine if significance exists between cells. If there is significance, post hoc analysis may be calculated in order to determine precisely which cells differ. These particular statistical manipulations are contained in a multivariate analysis of variance routine programmed by Jeremy Finn, State University of New York at Buffalo, and modified for the MSU CEC 3600 and 6500 computer systems by David J. Wright, Office of Research Consultation.

The minor hypothesis will be tested by a Significance Test for a difference between means.

Simple correlations of basic demographic data, Mf and F-MA raw scores will be calculated by a programmed routine (BASTAT). Both the FINN and BASTAT programs are available through the Office of Research Consultation, School for Advanced Studies, College of Education, Michigan State University.

## Statistical Hypotheses

$\alpha$ : Husband's Mf Level

$\beta$ : Wife's Mf Level

$\gamma$ : Interaction of Husband's and Wife's Mf Level

$j$ : Any Wife's Mf Score

$j'$ : Any Other Wife's Mf Score

$k$ : Any Husband's Mf Score

$k'$ : Any Other Husband's Mf Score

$jk$ : Any Couple's (husband and wife) Interaction of Mf Scores

$j'k'$ : Any Other Couple's (husband and wife) Interaction of Mf Scores

## Main Effects Hypotheses (Two)

(1) $H_o : \alpha_1 = \alpha_2 = \alpha_3$

$H_A$ : any $\alpha_j \neq \alpha_{j'}$

(2) $H_o : \beta_1 = \beta_2 = \beta_3 =$

$H_A$ : any $\beta_k \neq \beta_{k'}$

## Interactional Hypothesis

$H_o$ : all $\gamma_{jk}$ are equal, for $j = 1, 2, 3$; $k = 1, 2, 3$

$H_A$ : some $\gamma_{jk} \neq \gamma_{j'k'}$

## Difference of Means Hypothesis

$H_o : \mu_1 - \mu_2 = 0$

$H_A : \mu_1 - \mu_2 \neq 0$

# CHAPTER IV

# RESULTS AND DISCUSSION

## Introduction

The hypotheses tested in this study fall into two categories. The first category is concerned primarily with describing and explaining the relationship between masculinity-femininity (Mf) and Family-Marital Adjustment (F-MA). A single hypothesis comprises the second category. This hypothesis investigated the contemporary notion that Mf levels (as measured by the adapted version of the Gough Fe scale) have changed over the years. The results of these hypotheses are based on self-report measures of Mf (masculinity-femininity) and Family-Marital Adjustment (F-MA). The analysis was done between couples and can only be generalized to couples within the population. The analysis was based on three general categories of Mf, determined separately for males and females. This resulted in nine interactional Mf combinations for the couples sampled. The rationale for the determination of Mf categories was derived from Gough's original method of assessing adjectives describing high and low Mf scorers (Gough, 1952).

The first category of hypotheses investigated was analyzed in the following manner. Three sub-hypotheses were tested to determine if significance was found in any of the three relationships indicated in Figure 5.

FIGURE 5. Major Hypotheses and Sub-Hypotheses

| | Sub-Hypotheses |
|---|---|
| FIRST MAJOR HYPOTHESIS | 1. effect of husband's Mf level on F-MA scores<br>2. effect of wife's Mf level on F-MA scores |
| SECOND MAJOR HYPOTHESIS | 3. interactional effect of spouses Mf levels on F-MA scores |

Each sub-hypothesis was subjected to a mean vector F test for significance, as well as two step down F tests investigating the husband's and wife's F-MA scores separately. If the mean vector F tests were significant, then the step down F test would indicate precisely which dependent variable was most significant. It was postulated that both the first and second sub-hypotheses would be non-significant, but that the third, or interactional hypothesis would be significant, thus allows for post hoc comparison testing.

The second category of investigation (minor hypothesis) was to be analyzed using a significance test for a difference between means. It was hypothesized that no statistically significant change would be found between the means for college males and females, determined by Gough in 1957, and those college males and females included in this research.

## Results of Major Hypotheses

### Individual Mf levels as Predictors of F-MA Scores

It was postulated that neither the husband's nor wife's Mf level would be a statistically significant indicator of either spouse's F-MA score. This hypothesis was statistically substantiated as indicated by the following results. The F-Ratio for the Multivariate Test of

Equality of Mean Vectors was 0.7731, resulting in a P < .5434. This meant that considering the husband's Mf level in an individual manner, one could only explain 45.66 per cent of the F-MA scores. The step down F-ratio gives additional information by considering the F-MA scores in a related, but ordered manner. The husbands' F-MA scores were considered first and the wives' F-MA scores second. This meant that the power of the step-down F analysis was distributed to the relationship between the husband's Mf level and husband's F-MA scores, while the remainder of the analysis was expanded in testing the relationship between husbands' Mf levels and wives' F-MA scores. Figure 6 summarizes the analysis for this first sub-hypothesis.

FIGURE 6. Analysis of First Sub-Hypothesis of First Major Hypothesis

F-Ratio for Multivariate Test of Equality of Mean Vectors

D.F. = 4 and 342.0 0.7731 P < 0.5434

| Variable | Univariate F | P < | Step Down F | P < |
|---|---|---|---|---|
| F-MA Husband | 1.0944 | 0.3371 | 1.0944 | 0.3371 |
| F-MA Wife | 1.2711 | 0.2832 | 0.4592 | 0.6326 |

For any of the step down F-ratios to be significant it is necessary for the mean vector F-ratio to be statistically significant. The univariate F-ratios are included to indicate their relative relationship with the corresponding step down F values. The first step down F value will always be equal to its univariate F value. The order of placement of the step down F variables has no effect on the mean vector F-ratio. The mean vector P indicates the total relationship between husband's Mf level and all combined F-MA scores, while the univariate and step down P values provide information of a more specific nature. The simple univariate values indicate the predictive ability of the husband's Mf

level in relation to the husband's or wife's F-MA scores. The univariate values differ from the step down values in that the former values are independent of one another, and the latter are inter-related. The step down P values of this first sub-hypothesis suggest that knowledge of the husband's Mf level should aid in the determination of the husband's F-MA score 66.29 per cent of the time. The step down P value for the wife's F-MA variable suggests that given knowledge of the husband's Mf level, we should be able to determine a wife's F-MA score 36.74 per cent of the time.

In summary, the first sub-hypothesis in the testing of the first major hypothesis indicates that the husband's Mf level is not a statistically significant determinate of either husband's or wife's F-MA scores.

The second sub-hypothesis involved in the testing of the first major hypothesis investigated the effects of the wife's Mf level on either spouse's F-MA scores. The mean vector F-ratio (0.7339) testing the overall relationship resulted in a $P < 0.5694$, which is comparable to the mean vector F-ratio for the first sub-hypothesis ($P < 0.5434$); neither being statistically significant. The analysis of the second sub-hypothesis is found in Figure 7.

FIGURE 7. Analysis of Second Sub-Hypothesis of First Major Hypothesis

F-Ratio for Multivariate Test of Equality of Mean Vectors

D.F. = 4 and 342.0 0.7339 $P < 0.5694$

| Variable | Univariate F | P < | Step Down F | P < |
|---|---|---|---|---|
| F-MA Husband | 1.0016 | 0.3695 | 1.0016 | 0.3695 |
| F-MA Wife | 0.0082 | 0.9919 | 0.4729 | 0.6240 |

This second sub-hypothesis suggests that we should be able to determine the husband's or wife's F-MA score, 43.06 per cent of the time, based on knowledge of the wife's Mf level. The step down P values indicate that given the wife's Mf level we should be capable of determining the husband's F-MA score correctly at a rate of 63.05 per cent.

In conclusion, both sub-hypotheses were found to be statistically non-significant. These findings substantiated the first major hypothesis, that neither the husband's or wife's Mf level, considered individually, would be a significant predictor of F-MA scores.

Interaction of Spouses Mf levels as an Indicator of F-MA Scores

The third sub-hypothesis investigated the second major hypothesis in relation to the interactional process between the husband's and wife's Mf levels as it affects either spouse's F-MA score. This interactional hypothesis was postulated to be a significant determinate of F-MA scores. The mean vector F-ratio of 0.1172 resulted in a $P < 0.9986$. This suggests that the interactional effect of spouses Mf levels as a predictor of F-MA scores is less than chance. The univariate and step down P values conclusively reflect this large non-significance as listed in Figure 8.

FIGURE 8. Analysis of Third Sub-Hypothesis of Second Major Hypothesis

F-Ratio for Multivariate Test of Equality of Mean Vectors

D.F. = 8 and 342.0 0.1172 $P < 0.9986$

| Variable | Univariate F | $P <$ | Step Down F | $P <$ |
|---|---|---|---|---|
| F-MA Husband | 0.1426 | 0.9661 | 0.1426 | 0.9661 |
| F-MA Wife | 0.1613 | 0.9577 | 0.0926 | 0.9847 |

It was hypothesized that the interactional effects of the spouses Mf levels would be a significant indicator of at least one spouse's F-MA score. This hypothesis was not substantiated, thus post hoc comparison testing was not utilized to determine which Mf interactional pair or pairs were significant indicators of F-MA scores.

## Results of Minor Hypothesis

It was hypothesized that the means of male and female Mf scores as reported by the CPI would not significantly differ from those Mf scores obtained in this researcher's sample. This suggests, therefore, that those qualities associated with males and females, as measured by the adapted version of the Gough Fe scale, have not significantly changed. Figure 9 summarizes the relevant data as reported in the CPI manual, as well as the corresponding data obtained from this study's sample.

FIGURE 9. Data Comparison Table

| | Females | | | Males | | |
|---|---|---|---|---|---|---|
| | N | M | S.D. | N | M | S.D. |
| College Students (CPI Manual) | 803 | 23.16 | 3.27 | 787 | 16.65 | 3.73 |
| Married College Students (Present Study) | 181 | 23.27 | 2.86 | 181 | 16.54 | 3.04 |

The test for a difference between means substantiated what a cursory examination of the data seemed to indicate. The means of the Mf scores for college males and females as reported in the CPI manual did not differ significantly from those Mf scores reported in this

study (t scores = males 0.42; females -0.45). Apparently those characteristics associated with males and females, as measured by the Gough Fe scale, have remained remarkedly constant since Gough first obtained norms for the Fe scale in 1957.

## DISCUSSION

### Discussion of Major Hypotheses

The major purpose of this study was to explore a postulated relationship between masculinity-femininity and family-marital adjustment in spouses. Previous research suggested that further study would be in order to investigate sex role associated personality variables as related to marital adjustment (Tharp, 1963; Stephesn, 1968; Murstein and Glaudin, 1968; Barry, 1970). This study suggests that further research seeking to establish the single psychological variable of Mf as an indicator of F-MA scores, would probably prove statistically non-significant as well. The first major hypothesis stated that there would not be a significant relationship between an individual spouse's Mf category and either spouse's F-MA score. The two sub-hypotheses examined confirmed this hypothesis. The second major hypothesis examined postulated that there would exist a significant relationship between the interaction of both spouses Mf categories and their resulting F-MA scores. That is, the knowledge of both spouses Mf levels would be a significant indicator of at least one, if not both, spouses F-MA scores. This hypothesis was so soundly rejected that analysis indicates that chance prediction would be a more effective indicator of F-MA scores than would the information obtained by the knowledge of both spouses Mf scores. The results of the two major hypotheses imply that the psychological variable of masculinity-femininity (Mf), as measured by the adapted version of the

Gough Fe Scale, when considered separately is a non-significant indicator of F-MA, and when both of the spouses Mf categories are considered, is likewise a non-significant indicator of F-MA.

In the original selection of the population to be sampled, it was felt that the respondants might be a rather homogeneous group in regard to diversity of Mf scores. It was known that those individuals associated with higher education score in a more feminine direction than those individuals not exposed to higher education. This might suggest that the college population is not as representative of the total range of Mf scores as the general population. If the sample utilized in this research were skewed in a feminine direction when compared to the total Mf distribution of all individuals and lacked sufficient variation as was suggested by the standard deviation scores (s.d. = 3.04 males and 2.86 females), this could have partly influenced the results. This consideration was reflected in the selection of a large sample (N=181) in an effort to obtain a varied range of Mf scores approximating the universal distribution of all Mf scores. This might suggest that the college or university student population is an inappropriate population for the study of those variables depending on large variance as related to all individuals.

A second consideration to be discussed concerning the major hypotheses of this study is related to research previously mentioned by Murstein and Glaudin (1968) in which they indicated that a factor labeled Insensitive-Rigid, composed of the L and Mf scales from the MMPI, related significantly with marital adjustment. The present study in an effort to investigate certain aspects of role theory, namely sex-types, to family-marital adjustment, suggests that perhaps the power of the Insensitive-Rigid (I-R) factor as an indicator of F-MA

lies in the L loading rather than the Mf loading. It would be interesting to understand how the Mf loading contributes to the significance of the I-R factor as an indicator of F-MA. This not only indicates an area of potential research, but also has implications for the results of the present study.

A third point to be considered is the distribution of F-MA scores obtained in this study's sample as contrasted with a normal distribution of all F-MA scores. It is possible that the FCI scores in the present study represent a skewed distribution of F-MA scores as might be associated with the highly stressful role of married student.

Hofman's (1969) research indicated FCI means for clinical and non-clinical spouses (See Figure 10). The means of the FCI scores of this study compared with Hofman's results suggested similarities when contrasted with a hypothetical normal distribution.

FIGURE 10. Comparison of FCI Means

| | Clinical | Non-Clinical |
|---|---|---|
| Hofman | | |
| Average | 126.00 | 154.60 |
| Male (Husband) | 128.30 | 153.10 |
| Female (Wife) | 123.80 | 156.10 |
| This Study | | |
| Average | 140.35 | |
| Male (Husband) | 137.92 | |
| Female (Wife) | 142.97 | |

Certainly the males' mean for this study is closer to the clinical mean (9.62) than it is to the non-clinical mean (15.18), while the females' FCI mean is closer to the non-clinical mean (13.13) than to the clinical mean (19.17). The F-MA mean of combined male and female scores is approximately split between the clinical (14.45) and the non-clinical (14.15) means.

## Discussion of Minor Hypothesis

Popularized articles have suggested that traditionalized sex roles are significantly changing in contemporary society. It was of interest to this researcher to determine if this notion could be reflected vis-à-vis the comparison of current and past Mf scores of comparative samples. The hypothesis investigated stated that the means of males' and females' Mf scores had not significantly differed in the past years. This hypothesis was confirmed, thus suggesting that the sex traits related to sex types are not involved in the changing aspects of sex roles. Those sex-typed traits as related to masculinity and femininity have apparently remained quite constant, regardless of changing society. Further, it is this researcher's belief that the terms masculinity and femininity must be carefully defined by whomever is using them for whatever purposes. To say that masculinity and femininity, inrelation to sex roles, are changing is not substantiated by these data.

## Implications of the Study

The statistical results of this study imply that sex-typed traits have non-significant value when independently utilized as an indicator of F-MA scores. More specifically, Mf as a single independent variable, for either spouse considered separately or in combination, has no statistically significant value as a predictor of either spouses F-MA scores. The hypotheses that proved to be the most promising were those considering relationships involving an individual spouse's Mf category as it effects an individual spouse's F-MA score. These results raise the interesting notion that perhaps little value is gained from the study of sex types in relation to family or marital adjustment.

Further, it is implied that because sex typing is strongly related to the sex role concept, it may be that the conceptual value of sex roles as a factor in F-MA is also limited. Before we accept this implication one might consider that quite possibly it is the nature of the dependent variable that obscures the postulated relationship. The amalgamation of family and marital adjustment into a single dependent variable was predicated on the belief that it is the marital relationship that is the basis of family adjustment, and thus whatever was potentially a critical factor for adjustment in the marital relationship would also be equally critical for family adjustment. Certainly this notion has remained with us as a viable concept in the literature up to the present time (Olson, 1970). However, marriage and family, if one considers both a family state, differ primarily in one major aspect -- the presence or absence of children. Christensen (1967) states,

> Marriage is an institutionalized mating arrangement between human males and females, whereas family refers to marriage plus progeny; family, in other words, signifies a set of statuses and roles acquired through marriage and procreation (pg. 3).

The latter portion of Christensen's statement implies, that the individuals in the marital state are less psychologically involved in society than are the individuals in the family state. This suggests that role theory, sex roles, and sex types, as adjustment related variables perhaps are more applicable to the members of the family state than to the marital state. Trends such as earlier financial independence, mobility, and the rise of the nuclear family, all suggest fewer extended family expectations and controls. This reinforces the previously mentioned notion that the marriage in comparison to the family, is less involved in society, and thus subject to fewer social

expectations and sanctions, as represented by role theory, sex roles and sex types. This suggests that research investigating the F-MA of the marital state compared to the family state might prove the value of Mf as an indicator of adjustment. Before it is suggested that sex types are non-significant indicators of adjustment it would be necessary to split the sample of this research (N=181) into two groups -- those groups with and without children. These subgroups will then be subjected to the previously established statistical design and analysis used for the testing of the major hypotheses, in an attempt to determine if sex roles are represented by sex types is more viable as a concept for predicting adjustment in the family state than for adjustment in the marital state.

Serendipitous Research as Related to Implications of Findings

The serendipitous hypotheses to be investigated are very similar to the major hypotheses tested in the body of this study. The independent variable of children is added to the already present variable of spouses Mf category. These three hypotheses will be tested to determine the effect of spouses Mf category and the presence of children in the family on the dependent variable of F-MA scores.

$H_1$: The husband's Mf level and the presence of children has no effect on the F-MA scores.

$H_2$: The wife's Mf level and the presence of children has no effect on the F-MA scores.

$H_3$: The husband's Mf and wife's Mf levels and the presence of children has no effect on the F-MA scores.

For the reasons I have indicated earlier, the presence of children may be enough to cause a significant difference when compared to those

marriages without children. Also, it should be considered that those couples with children have usually been married for a greater number of years. This additional fact might contribute to potentially significant results. Figures 11 and 12 compare those families with and without children for F-MA means, mean years married and F-MA means as related to years married. A cursory investigation of these figures suggests that little clarification is gained when attempting to predict F-MA scores on the basis of years married and mean F-MA scores for couples with and without children.

FIGURE 11. Mean F-MA Scores for Spouses With and Without Children

| | MEANS OF F-MA SCORES | |
|---|---|---|
| | With Children | Without Children |
| Husband | 137.508 | 138.125 |
| Wife | 140.491 | 144.225 |
| Avg. Yrs. Married | 3.786 | 1.225 |

FIGURE 12. F-MA Means for Years Married

| | F-MA Means | | | |
|---|---|---|---|---|
| Years Married | Husband | Wife | Mean Years Married | Number of Couples |
| Less than 1 yr. | 133.631 | 144.578 | 0.000 | 38 |
| 1 - 2 years | 138.360 | 144.524 | 1,000 | 61 |
| 2 - 3 years | 139.687 | 140.000 | 2.000 | 32 |
| 3 - 5 years | 139.285 | 145.000 | 4.000 | 35 |
| Over 5 yrs. | 140.000 | 132.400 | 7.533 | 15 |

Given the three serendipitous hypotheses the task is to postulate the significance or non-significance of each suggested relationship. Figure 13, the Cell F-MA Means for all Mf Categories, contributes

information that should be useful in this task. Investigation of Figure 13 suggests that for each husband-wife Mf category in which the wife has an L (masculine) Mf category (3,6,9), the husband's F-MA mean score is lower than the other two husband's F-MA mean scores in the same general category. That is, husband's Mean F-MA score for 3, is lower than 1 and 2. Husband's Mean F-MA score for 6 is lower than 4 and 5, and husband's Mean F-MA score for 9 is lower than 7 and 8. This relationship suggests that knowledge of the wife's Mf category, and the presence of children in the family should enable us to predict the husband's F-MA scores. The hypothesis closest to this relationship is $H_2$. The mean vector F-ratio relates wives Mf category with the presence of children in the family to all F-MA scores. This overall P figure should be in a more significant direction than the mean vector F-ratio for the corresponding original hypothesis without children.

FIGURE 13. Cell F-MA Means for All Couples (N=181)

| Husbands Mf Category | Wifes Mf Category | Husbands F-MA Means | Wifes F-MA Means | Pair Number |
|---|---|---|---|---|
| H(1) | H(1) | 136.7143 | 141.3571 | 1 |
| | M(2) | 135.7391 | 139.1304 | 2 |
| | L(3) | 129.0000 | 137.5000 | 3 |
| M(2) | H(1) | 140.8788 | 145.5758 | 4 |
| | M(2) | 140.2564 | 144.2051 | 5 |
| | L(3) | 137.5185 | 146.5556 | 6 |
| L(3) | H(1) | 136.7778 | 137.7778 | 7 |
| | M(2) | 138.3913 | 142.3043 | 8 |
| | L(3) | 129.5714 | 139.2857 | 9 |

It was not expected that the mean vector F-ratio for the $H_2$ hypothesis would be significant. It was postulated that the

univariate F-ratio as represented by the P value for the husband's F-MA scores would have the best chance for significance.

The statistical results of the serendipitous hypotheses (Figure 14) confirms the suspected relationship. The comparative mean vector P values for the hypotheses relating wife's Mf category and F-MA scores, with and without children, indicates an increase in a significant direction. An increase of 42.07 per cent - from predicting 44.06 per cent of the F-MA scores to 86.13 per cent of the F-MA scores. The major portion of this increase in effectiveness lies in the ability to predict the husband's F-MA scores. The comparative univariate P values indicate an increase from .3695 to the .0358 levels of significance. This means that knowledge of the wife's Mf category and the presence of children in the family provides an indication of the husband's approximent F-MA level 96.42 per cent of the time. Although the results of the $H_2$ serendipitous hypothesis is not to be taken as conclusive, because of the small number of respondants in each cell, and the exploratory nature of the post hoc hypothesis, it certainly lends clarification to the implications of the findings of this research.

FIGURE 14. Analysis of Serendipitous Hypotheses

| | | | | |
|---|---|---|---|---|
| $H_1$ | F-Ratio for Multivariate Test of Equality of Mean Vectors - 0.9920 | | | |
| | D.F. = 4 and 102 | P<0.4155 | | |
| | Variable | Univariate F | P < | Step down F | P < |
| | F-MA Husband | 1.2267 | 0.3017 | 1.2267 | 0.3017 |
| | F-MA Wife | 0.9328 | 0.4000 | 0.7826 | 0.4627 |
| $H_2$ | F-Ratio for Multivariate Test of Equality of Mean Vectors = 1.7795 | | | |
| | D.F. = 4 and 102 | P<0.1387 | | |
| | Variable | Univariate F | P< | Step down F | P < |
| | F-MA Husband | 3.5553 | 0.0358 | 3.5553 | 0.0358 |
| | F-MA Wife | 0.4511 | 0.6394 | 0.1726 | 0.8420 |
| $H_3$ | F-Ratio for Multivariate Test of Equality of Mean Vectors - 0.7619 | | | |
| | D.F. - 8 aand 102 | P<0.7619 | | |
| | Variable | Univariate F | P < | Step down F | P < |
| | F-MA Husband | 0.4048 | 0.8043 | 0.4048 | 0.8043 |
| | F-MA Wife | 1.1543 | 0.3417 | 0.8406 | 0.5060 |

Implications of the Post Hoc Findings

Masculinity-femininity (sex types) proved to be ineffective as a significant indicator of all family-marital adjustment scores. The results implied that sex types and thus sex roles had little effect on the adjustment level of a family-marriage. This implication that deviancy from prescribed sex roles and thus sex typed behavior for spouses had little to do with discussing the adjustment of a family-marriage was a bit too powerful to conclude with. It was suggested that perhaps the dependent variable of F-MA was the confounding variable in the study. It was determined that the 181 couples should be separated into two groups, those with and without children, and to subject them to the same statistical analysis used for the body of this study. The rationale behind this approach was predicated on the thought that it is the married couple with children that comparatively interacts with society and thus is exposed to societal pressures to conform to traditional sex roles. Whereas the married couple without children is more or less free to avoid societal pressures. Testing of the post hoc hypotheses confirmed the suspicion that the sex role concept is more relevant for the family state, than for the marital state in explaining family or marital adjustment.

Seemingly, the presence of children in the family system invokes societal pressures that magnify sex typed traits in the spouses personality. Obviously spouses without children, and thus reduced societal pressures to conform to traditional sex roles, adjust to each others sex-typed personality traits so that marital adjustment is maximized, even if those traits do not conform to societal expectations. While the spouses with children are less able to adjust to sex typed behavior patterns that are inconsistent with society's expectations.

The means of the F-MA scores for the couples with children, Figure 15, suggests that as the wife's Mf category becomes more masculine, the husband's F-MA scores become lower. Conversely, the more feminine the wife's Mf category becomes, the higher are the husband's F-MA scores. These relationships are generally reinforced by the traditional sex role expectations of society.

FIGURE 15. Cell Means of F-MA Scores for Those Couples with Children

| Husbands Mf Category | Wifes Mf Category | Husbands F-MA Means | Wifes F-MA Means |
|---|---|---|---|
| | H | 141.5 | 146.0 |
| H | M | 129.8 | 132.6 |
| | L | 118.3 | 120.3 |
| | H | 144.5 | 145.1 |
| M | M | 136.7 | 139.3 |
| | L | 133.7 | 153.5 |
| | H | 157.0 | 143.0 |
| L | M | 143.3 | 141.8 |
| | L | 125.3 | 124.3 |

Finally, the results imply that Mf as a psychological variable is relatively ineffectual as an adjustment factor in the socially isolated conjugal relationship. Mf does not become viable until the individual spouses, particularly the wife, psychologically perceive themselves as members of society, or at least subject to societal expectations and pressures. If the wife possesses certain psychological sex-typed traits and acts accordingly, the husband can, given certain conditions, adjust to the behavior patterns of his wife, so that an acceptable level of marital happiness is maintained. However, the presence of children in the family system thrusts the husband into society and thus he experiences pressures to conform to traditional

sex roles, as reflected by sex typed behaviors and expectations. Psychologically, the wife possesses some degree of the sex typed behaviors expected by the husband. If she is more or less capable of behaving in a manner consistent with the expectations of society and her spouse, then the adjustment level of the spouse is maximized. However, if the wife does not possess the expected sex typed personality traits then the husband's F-MA scores diminish to significantly lower levels.

In summary, the implications of this study suggest that role theory and sex roles as represented by sex types should provide a fruitful basis for research related to the prediction of family, but not marital adjustment.

In relation to previous research, this study would, in part, support Murstein and Glaudin's (1968) conclusions that rejecting feminine attitudes for both men and women is associated with marital dissatisfaction. The present study, based on a college population, would support Murstein and Glaudin's comments regarding women, but not for men. It would also explain why any present or future attempts to duplicate their findings could end in failure. Murstein and Glaudin's sample consisted of marrieds with children. The implications of this research suggest that if a sample included couples without children, significant results might not be obtained. In the same study, Murstein and Glaudin (1968) used the ICL, and found similar results for women but not men. The present study would support their findings for the conclusions obtained relating rejection of feminine attitudes in females and the resultant marital dissatisfaction.

It is difficult to determine if the results of the minor hypothesis have any valid implications whatever. Certainly the results do not

substantiate the findings of previous studies that suggest changes in Mf levels for males and females over the past years (Barry, et.al., 1957; Brown, 1958). Likewise, it is hypothesized that the related sex role behaviors of males and females have also changed, or at least have become less well defined than in previous years (McNeil, 1969, pg. 204). Taking these latter studies into consideration would imply that it is quite possible that the results of the present research (minor hypothesis) are in isolation. However, it is interesting to note that if these results (minor hypothesis) are not unique, but an accurate assessment of the state of Mf traits, as related to sex roles, it is feasible to postulate that sex role related behavior is perhaps a type of overt manifestation referred to as acting out behavior (McNeil, 1969, pg. 197). This phenomenon would provide an explanation for both the stable sex related attitudinal traits and the apparent and often times exaggerated, changing sex role behaviors of both males and females in contemporary society. That is, if individuals are expected by society to behave in a manner resembling traditional sex roles and related attitudes, but internally hold a set of sex typed traits somewhat less extreme than those traditional expectations, the individual might experience a degree of frustration, that if intense enough, could lead to a behavioral phenomenon called acting out -- overt behaviors directed so as to express and perhaps magnify internal feelings of frustration.

As suggested previously, these findings are the exception to much of the past and current data regarding the changing Mf traits of males and females, thus the latter postulated implications are pure speculation, and not to be taken as conclusive in any sense.

# CHAPTER V

# SUMMARY AND CONCLUSIONS

## Summary

This research was an attempt to investigate an attitudinal aspect of role theory as related to family-marital adjustment. The self-reported measures of masculinity-femininity and family-marital adjustment were obtained using adaptations of previously established questionnaires (Gough Fe Scale, van der Veen's Family Concept Inventory). The Mf scores represent a differentiation between males and females based on cognitive and interest traits. The family-marital adjustment instrument examines marriages in which the spouses express attitudes and behaviors ultimately measured against an ideal family and/or marriage.

The 181 couples who participated in the study were University students living in married student housing at Michigan State University. The couples responded in their homes under the supervision of a trained interviewer. The couples were asked not to communicate with one another until both had completed the questionnaires, so that independence of spouses answers could be maximized.

As was postulated in the first major hypothesis, no statistically significant relationship existed between either spouse's individual Mf category and either spouse's F-MA score. The second major hypothesis stated that there would be a significant relationship between the information gained by knowledge of both spouses' Mf categories and either spouse's F-MA score. This hypothesis was not statistically supported.

The minor hypothesis stated that there would not be a significant difference between the normative means of Mf scores for males and females as previously established by Gough, in 1957, and the Mf means of this sample. This hypothesis was supported as neither the males nor females Mf means differed significantly from the previously established means. This study indicated that there was no statistically significant relationship between masculinity-femininity and family-marital adjustment.

However, it was felt that the implications as suggested by the results of the major hypotheses were too powerful not to attempt further clarification. The sample was divided into those couples with and without children. The same multivariate design and analysis was used in testing the post hoc hypotheses. As was hypothesized, the univariate F-ratio indicating the relationship between the wife's Mf level with children and the husband's F-MA level was significant at the .0385 level. This suggested that for couples without children Mf is not to be considered as a useful indicator of F-MA, but for couples with children, the wife's Mf level can be considered as a useful indicator for the husband's F-MA level. This suggests that the advent of children into the marital state causes the spouses to interact with society in such a fashion that the individuals are compelled to conform to sex role expectations. Failure by the wife to conform to normative feminine sex role expectations negatively affects the husband's F-MA levels in a direct manner.

## Limitations of the Present Study

It is suspected that three factors contributed to the limitations of this study. The first factor concerned the homogeneity of the

population chosen. It is believed that the distribution of Mf scores tended to be skewed in a feminine direction, because of the educational influence. Although a large sample (N=181) was selected in an attempt to counteract this suspected factor, it appears that a sample, more representative of the total married population (student and non-student) would be desirable before conclusive statements can be made. A second consideration concerns the distribution of F-MA scores as possibly affected by the married student's stressful environment. The clinical and non-clinical norms (Hofman, 1969) suggest that the F-MA scores for the present study's sample are perhaps skewed in a clinical direction. Lastly, it is suspected that the variable of masculinity-femininity, considered in isolation, simply is not as powerful as was originally suspected. The addition of a variable similar to the L scale; from the MMPI, with the Mf variable, thus creating a complex variable, might prove to be a stronger indicator of F-MA.

It is felt that the first two factors were perhaps the most limiting aspects of this study. Given two femininity skewed Mf distributions and a negatively skewed distribution of F-MA scores seriously reduced the potential of significant statistical results.

A minor limitation concerns the adapted version of the FCI, used for measurement of family-marital adjustment scores. It is suspected that the instrument fails to account for the conservative or liberal orientation of the subjects responding. A conservative individual, reasonably well adjusted in marriage, responding to the items in the questionnaire, might chose to select responses reflecting their personality nature. That is, they might generally indicate a conservative response such as agree or disagree, rather ~~than a liberal response, such as agree or disagree~~, rather than a liberal response, such as

strongly agree or strongly disagree. There is potentially a difference of 48 points between two individuals manifesting these diverse response patterns. This suggests that it would be difficult to determine the difference between a liberally responding individual with average adjustment and a well adjusted, conservatively responding individual. It is true that, in terms of adjustment, both are average or above, but this non-distinction could have contributed to the limited results of the study.

While the post hoc implications are somewhat limited because of the smaller number of couples per cell, the resulting relationship between wives' Mf level, with children present in the family system and the husbands' F-MA level, appear to be more than simple chance statistical manipulations. The consistent related ordering of the husband's F-MA scores, regardless of the Mf category, strongly implies that the suspected relationship between the wives' Mf level and the husbands' F-MA score is one of distinct viability and warrants considerable attention in the discussion of family adjustment.

## Suggestions for Future Research

The major task of this research was to determine if there was a significant relationship between the independent variable of Mf and the dependent variable of adjustment in the family-marital situation. With the apparent determination that there is a relationship, it was additionally implied what the relationship most likely would be. Knowledge of the wife's Mf level and the presence of children in the family state, does not tell why the husband's, and thus the families, state of adjustment is effected, in a direct manner. Specifically, what is the unique cause and effect relationship between the wives'

(Mf) sex typed personality traits and the presence of children in the family system that manipulates the husbands' F-MA level? Is this relationship only valid for married college students, or can the same findings be applied to a more general population?

Because of the post hoc nature of these findings it is essential that the portion of the research associated with the suggested relationship of the wife's Mf, children present, and husband's F-MA level be replicated so that more conclusive relational statements can be made. Assuming the replication of the suggested relationship, it would then be necessary to determine the precise intra- and inter-relational dynamics of the family system which cause the husband's F-MA to be directly related to the wife's Mf level with children present. It has been known for some time that the advent of children into the conjugal situation usually resulted in a slight lowering of the adjustment level of that relationship. However, the additional question is raised that perhaps it is not a child in the relationship that precipitates the suggested relationship of the post hoc findings, but the presence of any third party actively interacting in the conjugal system.

The patterned ordering of the husband's F-MA scores in relation to the wife's Mf categories suggest that pre-disposing factors far in advance of the child's entrance into the family system are equally, if not more, critical in the determination of the adjustment of a family.

An analysis of the specific Mf traits of the masculine wife, as differentiated from the feminine wife, and the F-MA traits of the husband experiencing low levels of adjustment as compared to the husband with a high level of adjustment, should suggest relevant areas

of potential research as related to this study and the questions it raises. Using a measure called the Index of Discrimination (I.D.) we can identify those traits that distinguish the upper 27 per cent of respondants from the lower 27 per cent. This analysis is consistent with the general distribution of female subjects into categories of 25 per cent feminine, 50 per cent equalitarian, and 25 per cent masculine. The same upper and lower 27 percentages are utilized for the comparison of F-MA traits for husbands of low and high adjustment levels. For determination of the wives' Mf traits, questionnaire items having an I.D. of 25 per cent or greater were chosen as significant, while items having an I.D. of 50 per cent or greater were chosen for the husbands and families descriptive characterization. The I.D. is obtained by deriving the differences between the percentage of the upper and lower 27 per cent of the subjects that respond to the same question. If 90 per cent of the upper 27 per cent responded true to question A and 50 per cent of the lower 27 per cent responded true to the same question, the I.D. would be 40 per cent. See Appendix G for a complete listing of all questionnaire items and their I.D. scores.

The item analysis suggests a masculine wife (female) who is characterized as a person strongly rejecting roles previously defined by society as traditionally feminine. She manifests an extroverted style of behavior as evidenced by her minimal need for order and control. This individual appears to possess personal and social confidences. However this confidence is sometimes used in the manipulation of others for whom minimal concern is shown. As problematic events are encountered, others are often blamed for their occurrence in a somewhat petty and irritable manner.

The husband perceives the spousal relationship as having minimal positive interaction and mutual dislike of each others friends. Understandably each spouse seeks separate interests and activities even though pressure is applied to manifest a superficial sense of togetherness as evidenced by the actions of the spouses to restrict each others individual development. The traits of the wife and the perceptions of the husband somehow contribute to create a family that encounters numerous little problems that defy the mobilization of the appropriate resources necessary for their resolution. Amid much conflict, these originally small problems become quite large and unmanagable. The family as a unit is thus subjected to stresses that suggest an atmosphere enhancing a poor family self-image apparently contributing to or engendering a lack of committment by the family members. Deprived of internal strength, the family members turn to scapegoating, a situation in which influences external to the family system are blamed for the family's current plight.

Is the strong rejection of traditional feminine roles by the more masculine female an expression of sexaul liberation and discontent with a stereotyped image of what females should be, or is the rejection a rejection of self, as female, of general insecurity and lack of confidence in her ability to carry out the epxectations of the female as wife and mother?

Is the rejection of the traditional feminine image by the female associated with rejection of nurturing capacities as a wife and mother? Or is it possible that instead of being a nurturing individual, the more masculine female confuses nurturance with manipulation of others, especially her spouse?

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# APPENDIX A

APPENDIX A

COVER LETTER

MICHIGAN STATE UNIVERSITY - East Lansing, Michigan 48823

College of Home Economics - Department of Family and Child Sciences
Home Economics Building

April 28, 1970

TO: Residents of MSU Married Housing

FROM: David R. Imig

Within the next week you can expect a visit from a student from the Department of Family and Child Sciences, College of Home Economics. She will be calling on you to ask for your help in collecting information relating to individual and marital beliefs and attitudes of residents of University Married Housing.

The purpose for collecting these data are:

1. To aid in determining the emphasis of direction for the inter-disciplinary committee on married housing. Additional information about this committee and its goals can be obtained by contacting me.

2. To provide data for on-going research related to families living in MSU Married Housing for which programs may be developed to meet needs as related to the unique environment.

3. To give students experience-based learning as related to the field of family research.

If this project is to be a success, YOUR cooperation is needed.

If you desire additional information, or have comments concerning this project, please contact me at 355-3519.

Thank you.

# APPENDIX B

APPENDIX B

DEMOGRAPHIC DATA SHEET

PLEASE COMPLETE THE FOLLOWING INFORMATION SHEET

1. Wife's age: _____ yrs.
2. Is wife a student? Yes _____ No _____

   --if yes, graduate or undergraduate?

   _____

   --if no, do you work outside of home?

   _____
3. Husband's age:_____ yrs.
4. Is husband a student? Yes _____ No _____

   --if yes, graduate or undergraduate?

   _____

   --if no, do you work outside of home?

   _____
5. Years married: _____
6. Children: Yes _____ No _____

   If yes, number: _____

   ages: _____

# APPENDIX C

APPENDIX C

Masculinity-Femininity Scale

Directions: Indicate your own response to the following statements by marking the appropriate circle.

| True | False | | |
|---|---|---|---|
| 0 | 0 | 1. | I am very slow in making up my mind. |
| 0 | 0 | 2. | I think I would like the work of a building contractor. |
| 0 | 0 | 3. | I think I would like the work of a dress designer. |
| 0 | 0 | 4. | I become quite irritated when I see someone spit on the sidewalk. |
| 0 | 0 | 5. | It is hard for me to start a conversation with strangers. |
| 0 | 0 | 6. | I consider a matter from every standpoint before I make a decision. |
| 0 | 0 | 7. | I must admit that I enjoy playing practical jokes on people. |
| 0 | 0 | 8. | I get very tense and anxious when I think other people are disapproving of me. |
| 0 | 0 | 9. | A windstorm terrifies me. |
| 0 | 0 | 10. | I think I would like the work of a clerk in a large department store. |
| 0 | 0 | 11. | I get excited very easily. |
| 0 | 0 | 12. | Sometimes I just can't seem to get going. |
| 0 | 0 | 13. | I like to boast about my achievements every now and then. |
| 0 | 0 | 14. | I think I would like the work of a garage mechanic. |
| 0 | 0 | 15. | I like adventure stories better than romantic stories. |
| 0 | 0 | 16. | I prefer a shower to a bath-tub. |
| 0 | 0 | 17. | The average person is not able to appreciate art and music very well. |
| 0 | 0 | 18. | I usually feel that life is worthwhile. |
| 0 | 0 | 19. | The thought of being in an automobile accident is very frightening to me. |
| 0 | 0 | 20. | Sometimes I have the same dream over and over again. |
| 0 | 0 | 21. | I think I am stricter about right and wrong than most people. |
| 0 | 0 | 22. | I think I would like to drive a racing car. |
| 0 | 0 | 23. | I like to be with a crowd who play jokes on one another. |
| 0 | 0 | 24. | I often wish people would be more definite about things. |
| 0 | 0 | 25. | I am somewhat afraid of the dark. |
| 0 | 0 | 26. | I think I could do better than most of the politicians if I were in office. |
| 0 | 0 | 27. | I always tried to make the best grades in school that I could. |
| 0 | 0 | 28. | I am inclined to take things hard. |
| 0 | 0 | 29. | I would like to be a soldier. |
| 0 | 0 | 30. | I seem to be about as capable and smart as most others around me. |
| 0 | 0 | 31. | At times I feel like picking a fist fight with someone. |
| 0 | 0 | 32. | I like to go to parties and other affairs where there is lots of loud fun. |
| 0 | 0 | 33. | I very much like hunting. |
| 0 | 0 | 34. | In school I was sometimes sent to the principal for cutting up. |

| True | False | | |
|---|---|---|---|
| 0 | 0 | 35. | I think I would like the work of a librarian. |
| 0 | 0 | 36. | I enjoy social gatherings just to be with people. |
| 0 | 0 | 37. | Sometimes I feel that I am about to go to pieces. |
| 0 | 0 | 38. | I would like to be a nurse. |
| 0 | 0 | 39. | If I were a reporter I would like very much to report news of the theater. |
| 0 | 0 | 40. | I like mechanics magazines. |
| 0 | 0 | 41. | I want to be an important person in the community. |
| 0 | 0 | 42. | I must admit that I feel sort of scared when I move to a strange place. |
| 0 | 0 | 43. | I'm pretty sure I know how we can settle the international problems we face today. |
| 0 | 0 | 44. | If I get too much change in a store I always give it back. |
| 0 | 0 | 45. | I regard the right to speak my mind as very important. |

# APPENDIX D

## APPENDIX D

## FAMILY-MARITAL ADJUSTMENT INSTRUMENT

Directions: Indicate the degree of your agreement or disagreement with each of the following items as it applies to your immediate family (husband or wife and children) and mark the circle representing the appropriate response. First impressions are satisfactory, and most people are able to complete this inventory in 10 minutes. It is quite important that you give a response to each item, even though it may sometimes be difficult to make a decision.

| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 1. | We usually can depend on each other. | 0 | 0 | 0 | 0 | 0 |
| 2. | We have a number of close friends. | 0 | 0 | 0 | 0 | 0 |
| 3. | We feel secure when we are with each other. | 0 | 0 | 0 | 0 | 0 |
| 4. | We do many things together. | 0 | 0 | 0 | 0 | 0 |
| 5. | Each of us wants to tell the others what to do. | 0 | 0 | 0 | 0 | 0 |
| 6. | If we had more money most of our present problems would be gone. | 0 | 0 | 0 | 0 | 0 |
| 7. | There are serious differences in our standards and values. | 0 | 0 | 0 | 0 | 0 |
| 8. | We feel free to express any thoughts or feelings to each other. | 0 | 0 | 0 | 0 | 0 |
| 9. | Our home is the center of our activites. | 0 | 0 | 0 | 0 | 0 |
| 10. | We are an affectionate family. | 0 | 0 | 0 | 0 | 0 |
| 11. | It is not our fault that we are having difficulties. | 0 | 0 | 0 | 0 | 0 |
| 12. | We do not spend enough time together. | 0 | 0 | 0 | 0 | 0 |
| 13. | Little problems often become big ones for us. | 0 | 0 | 0 | 0 | 0 |
| 14. | We do not understand each other. | 0 | 0 | 0 | 0 | 0 |
| 15. | We get along very well in the community. | 0 | 0 | 0 | 0 | 0 |
| 16. | We often praise or compliment each other. | 0 | 0 | 0 | 0 | 0 |
| 17. | We do not talk about sex. | 0 | 0 | 0 | 0 | 0 |
| 18. | We take care of each other. | 0 | 0 | 0 | 0 | 0 |
| 19. | We get along much better with persons outside the family. | 0 | 0 | 0 | 0 | 0 |
| 20. | We are proud of our family. | 0 | 0 | 0 | 0 | 0 |
| 21. | We do not like each other's friends. | 0 | 0 | 0 | 0 | 0 |
| 22. | There are many conflicts in our family. | 0 | 0 | 0 | 0 | 0 |
| 23. | We are usually calm and relaxed when we are together. | 0 | 0 | 0 | 0 | 0 |
| 24. | We are all responsible for our family problems. | 0 | 0 | 0 | 0 | 0 |
| 25. | We respect each other's privacy. | 0 | 0 | 0 | 0 | 0 |
| 26. | Accomplishing what we want to do seems to be difficult for us. | 0 | 0 | 0 | 0 | 0 |
| 27. | We tend to worry about many things. | 0 | 0 | 0 | 0 | 0 |
| 28. | We are continually getting to know each other better. | 0 | 0 | 0 | 0 | 0 |
| 29. | We encourage each other to develop in his or her own individual way. | 0 | 0 | 0 | 0 | 0 |
| 30. | There is not enough discipline in our family. | 0 | 0 | 0 | 0 | 0 |
| 31. | We have warm, close relationships with each other. | 0 | 0 | 0 | 0 | 0 |

| | | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 32. | Together we can overcome almost any difficulty. | 0 | 0 | 0 | 0 | 0 |
| 33. | We really do trust and confide in each other. | 0 | 0 | 0 | 0 | 0 |
| 34. | The family has always been very important to us. | 0 | 0 | 0 | 0 | 0 |
| 35. | We get more than our share of illness. | 0 | 0 | 0 | 0 | 0 |
| 36. | We rarely hurt each other's feelings. | 0 | 0 | 0 | 0 | 0 |
| 37. | We are considerate of each other. | 0 | 0 | 0 | 0 | 0 |
| 38. | We can stand up for our rights if necessary. | 0 | 0 | 0 | 0 | 0 |
| 39. | We have very good times together. | 0 | 0 | 0 | 0 | 0 |
| 40. | We live largely by other people's standards and values. | 0 | 0 | 0 | 0 | 0 |
| 41. | Usually each of us goes his own separate way. | 0 | 0 | 0 | 0 | 0 |
| 42. | We are full of life and good spirits. | 0 | 0 | 0 | 0 | 0 |
| 43. | We resent each other's outside activities. | 0 | 0 | 0 | 0 | 0 |
| 44. | We have respect for each other's feelings and opinions even when we differ strongly. | 0 | 0 | 0 | 0 | 0 |
| 45. | We sometimes wish we could be an entirely different family. | 0 | 0 | 0 | 0 | 0 |
| 46. | We are sociable and really enjoy being with people. | 0 | 0 | 0 | 0 | 0 |
| 47. | We are a disorganized family. | 0 | 0 | 0 | 0 | 0 |
| 48. | We are satisfied with the way in which we now live. | 0 | 0 | 0 | 0 | 0 |
| 49. | We are not really fond of one another. | 0 | 0 | 0 | 0 | 0 |
| 50. | We are a strong, competent family. | 0 | 0 | 0 | 0 | 0 |
| 51. | We just cannot tell each other our real feelings. | 0 | 0 | 0 | 0 | 0 |
| 52. | We are not satisfied with anything short of perfection. | 0 | 0 | 0 | 0 | 0 |
| 53. | We forgive each other easily. | 0 | 0 | 0 | 0 | 0 |
| 54. | We usually reach decisions by discussion and compromise. | 0 | 0 | 0 | 0 | 0 |
| 55. | We can adjust well to new situations. | 0 | 0 | 0 | 0 | 0 |
| 56. | Our decisions are not our own, but are forced on us by circumstances. | 0 | 0 | 0 | 0 | 0 |
| 57. | We are a deeply religious family. | 0 | 0 | 0 | 0 | 0 |

# APPENDIX E

Example: First Print-Out Number

2 4 2 4 1 2 2 0 2 1 1 0 0 0 1 1 0 3 2 5 1 1 2 3 1 1 4 1 3 6 1 1 4

| Col No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15/17 | 18/20/22 | 23/25/31 | 32 | 33/35 | 36 | 37/39 | 40 | 41/43 | 44 | 45 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 4 | 2 | 4 | 1 | 2 | 2 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 3 | 2 | 5 | 1 | 1 | 2 | 3 | 1 | 1 | 4 | 1 | 3 | 6 | 1 | 1 | 4 |

Key:

| | | |
|---|---|---|
| Col | 1-2 | wives age |
| | 3-4 | husbands age |
| | 5 | is wife a student 1=yes 2=no |
| | 6 | is husband a student 1=yes 2=no |
| | 7 | what level is wife 0=other 1=UG 2=Grad |
| | 8 | what level is husband 0=other 1=UG 2=Grad |
| | 9 | does wife work 1=yes 2=no |
| | 10 | does husband work 1=yes 2=no |
| | 11 | number of years married |
| | 12 | number of children |
| | 13-15 | respondents ID number |
| | 16 | blank |
| | 17-18 | husbands raw Mf score |
| | 19 | blank |
| Col | 20 | husbands Mf category |
| | 21 | blank |
| | 22-23 | wives raw Mf score |
| | 24 | blank |
| | 25 | wives Mf category |
| | 26-30 | blank |
| | 31-33 | average raw F-MA score |
| | 34 | blank |
| | 35-37 | husbands raw F-MA score |
| | 38 | blank |
| | 39-41 | wives raw F-MA score |
| | 42 | blank |
| | 43-45 | lowest raw F-MA score |

Print-Out:

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2424|2202|10001  10 3 25 1    123 114 136 114
2122|1112200002  17 2 25 1    137 131 144 131
2625210222320003 14 3 25 1    141 139 144 139
2727210|1293004  22 1 24 2    151 160 143 143
2730210222520005 17 2 30 1    164 152 177 152
2526210212200006 18 2 22 2    144 134 155 134
2126121021210007 15 2 25 1    152 150 155 150
2326210212100008 13 3 25 1    149 147 152 147
2121111122|0009  15 2 24 2    159 158 158 158
2627210222400|0  18 2 27 1    157 148 167 148
2829|1222230011  15 2 21 3    125 122 128 122
2839|1222220012  17 2 15 3    150 150 151 150
2022210|1210013  13 3 22 2    151 152 150 150
1919|2101201014  11 3 19 3    094 098 091 091
2225210212200|5  19 1 24 2    131 134 128 128
2729|2201261016  22 1 23 2    094 082 107 082
2832210212200|7  22 1 22 2    125 128 123 123
2521210212100|8  18 2 21 1    149 144 154 144
2323111122200|9  20 1 22 2    126 116 137 116
2123111221|0020  20 1 26 1    169 176 162 162
2124111221|0021  09 3 24 2    108 100 117 100
2325111224002|2  16 2 20 3    132 140 115 115
2323111122310|3  10 1 20 3    101 100 102 100
3030210212910|4  18 2 23 2    132 125 139 125
2323210112100|5  15 2 22 2    132 121 145 121
2122111122002|6  21 1 25 1    154 151 157 151
2424210222100|7  18 2 21 3    150 149 151 149
2633112221520|8  14 3 24 2    144 134 155 134
2727210212510|9  16 2 24 2    123 122 125 122
2323210212100|0  14 3 25 1    103 112 094 094
2021210112100|1  17 2 17 3    138 136 141 136
2527112212400|2  16 2 22 2    168 152 184 152
2322210|12100|3  12 3 24 2    148 138 159 138
2428112212200|4  14 3 25 1    137 141 134 134
2021111122100|5  18 2 24 2    145 144 146 144
2124210112000|6  17 2 28 1    139 134 145 134
1922111222000|7  19 1 26 1    115 123 108 108
2121111122100|8  09 3 24 2    157 151 164 151
2425112222100|9  18 2 27 1    156 146 167 146
2223112222100|0  18 2 23 2    145 146 144 144
3435210222820|1  15 2 19 3    147 146 149 146
2121111112000|2  20 1 24 2    147 139 155 139
2121210112100|3  17 2 25 1    143 136 151 136
1821111122000|4  13 3 24 2    116 102 131 102
2223210212000|5  21 1 22 2    142 122 162 122
2121210112100|6  20 1 24 2    137 131 144 131
2121111121110|7  17 2 24 2    150 140 160 140
1822210111000|8  16 2 21 3    101 096 107 096
2021210121110|9  14 2 21 3    163 146 180 146
2223210122100|0  19 1 21 3    148 129 168 129
1929210212000|1  15 2 28 1    114 091 137 091
2023121021100|2  18 2 24 2    146 132 160 132
2224210212100|3  18 2 25 1    132 134 130 130
2127111222100|4  19 1 23 2    159 167 151 151
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| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2324112222!0055 | 16 | 2 | 21 | 3 | 138 | 136 | 141 | 136 |
| 222321021210056 | 21 | 1 | 24 | 2 | 151 | 512 | 151 | 151 |
| 252621021241057 | 13 | 3 | 21 | 3 | 133 | 138 | 129 | 129 |
| 222221021200058 | 15 | 2 | 27 | 1 | 143 | 143 | 144 | 143 |
| 323921021210059 | 18 | 2 | 17 | 3 | 141 | 136 | 147 | 136 |
| 232212101100060 | 14 | 3 | 22 | 2 | 116 | 105 | 127 | 105 |
| 222221012221061 | 20 | 1 | 22 | 2 | 137 | 144 | 130 | 130 |
| 202321011200062 | 14 | 3 | 24 | 2 | 147 | 136 | 159 | 136 |
| 252521022230063 | 15 | 2 | 26 | 1 | 177 | 183 | 161 | 161 |
| 212111112810064 | 13 | 3 | 20 | 3 | 134 | 123 | 146 | 123 |
| 232521022242065 | 18 | 2 | 29 | 1 | 125 | 139 | 112 | 112 |
| 282721021262066 | 13 | 3 | 24 | 2 | 127 | 129 | 136 | 126 |
| 222312102120067 | 17 | 2 | 27 | 1 | 137 | 161 | 114 | 114 |
| 222321011220068 | 15 | 3 | 20 | 3 | 134 | 126 | 142 | 126 |
| 222212101200069 | 17 | 2 | 23 | 2 | 128 | 120 | 137 | 120 |
| 202021012200070 | 15 | 2 | 25 | 1 | 133 | 137 | 129 | 129 |
| 324311222220071 | 20 | 1 | 25 | 1 | 073 | 083 | 064 | 064 |
| 212011112211072 | 17 | 2 | 17 | 3 | 143 | 137 | 149 | 137 |
| 212221022211073 | 18 | 2 | 24 | 2 | 148 | 164 | 133 | 133 |
| 222311112211074 | 14 | 3 | 23 | 2 | 138 | 130 | 146 | 130 |
| 262821012241075 | 16 | 2 | 24 | 2 | 139 | 126 | 152 | 126 |
| 242621021230076 | 15 | 2 | 23 | 2 | 150 | 139 | 161 | 139 |
| 382921022141077 | 18 | 2 | 25 | 1 | 122 | 118 | 127 | 118 |
| 262611122250078 | 17 | 2 | 20 | 3 | 157 | 158 | 157 | 157 |
| 242111112221079 | 20 | 1 | 22 | 2 | 141 | 143 | 139 | 139 |
| 272711221100080 | 22 | 1 | 19 | 3 | 150 | 152 | 148 | 148 |
| 192011111110081 | 17 | 2 | 24 | 2 | 149 | 157 | 142 | 142 |
| 222311222120082 | 16 | 2 | 22 | 2 | 145 | 146 | 144 | 144 |
| 232321021220083 | 17 | 2 | 26 | 1 | 160 | 155 | 166 | 155 |
| 504821022293084 | 20 | 1 | 29 | 1 | 150 | 165 | 135 | 135 |
| 403521022251085 | 14 | 3 | 24 | 2 | 119 | 131 | 107 | 107 |
| 222211112200086 | 21 | 1 | 24 | 2 | 129 | 141 | 118 | 118 |
| 192021012211087 | 16 | 2 | 23 | 2 | 130 | 138 | 123 | 123 |
| 192011112200088 | 18 | 2 | 28 | 1 | 133 | 130 | 136 | 130 |
| 222221021200089 | 15 | 2 | 22 | 2 | 149 | 145 | 154 | 145 |
| 202111112200090 | 15 | 2 | 19 | 3 | 142 | 127 | 158 | 127 |
| 262812201171091 | 13 | 3 | 24 | 2 | 141 | 152 | 130 | 130 |
| 242521021221092 | 16 | 2 | 28 | 2 | 165 | 155 | 176 | 155 |
| 202121011200093 | 15 | 2 | 22 | 2 | 128 | 136 | 120 | 120 |
| 222321011241094 | 08 | 3 | 23 | 2 | 144 | 152 | 137 | 137 |
| 212211112210095 | 19 | 1 | 22 | 2 | 119 | 122 | 117 | 117 |
| 263521022271096 | 21 | 1 | 25 | 1 | 108 | 133 | 084 | 084 |
| 192011112210097 | 15 | 2 | 20 | 3 | 131 | 124 | 139 | 124 |
| 192011112210098 | 15 | 2 | 31 | 1 | 125 | 134 | 116 | 116 |
| 242421011261099 | 15 | 2 | 23 | 2 | 118 | 136 | 101 | 101 |
| 262621022221100 | 13 | 3 | 24 | 2 | 159 | 149 | 170 | 149 |
| 262721022240101 | 22 | 1 | 22 | 2 | 144 | 158 | 130 | 130 |
| 272711222250102 | 17 | 2 | 22 | 2 | 150 | 144 | 155 | 144 |
| 212221012233103 | 18 | 2 | 23 | 2 | 144 | 137 | 151 | 137 |
| 414121022292104 | 25 | 1 | 24 | 2 | 124 | 128 | 121 | 121 |
| 222221011200105 | 17 | 2 | 19 | 3 | 167 | 151 | 133 | 151 |
| 232321021220106 | 10 | 3 | 24 | 2 | 149 | 151 | 147 | 147 |
| 222621022220107 | 14 | 3 | 24 | 2 | 132 | 129 | 135 | 129 |
| 222321021210183 | 19 | 1 | 23 | 2 | 134 | 118 | 151 | 118 |
| 232521011200109 | 21 | 1 | 24 | 2 | 149 | 140 | 159 | 140 |
| 262611211240110 | 14 | 3 | 19 | 3 | 154 | 161 | 147 | 147 |
| 242521021120111 | 13 | 2 | 24 | 2 | 157 | 139 | 175 | 139 |
| 232211211200112 | 17 | 2 | 21 | 3 | 153 | 151 | 156 | 151 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 28242 | 02 | 12 | 1 | 1 | 13 | 14 | 3 | 23 | 2 |
| 20201 | 1 | 1 | 22 | 00 | 14 | 16 | 2 | 21 | 3 |
| 20211 | 1 | 1 | 22 | 10 | 15 | 16 | 2 | 22 | 2 |
| 22231 | 1 | 2 | 12 | 10 | 16 | 15 | 2 | 21 | 3 |
| 23262 | 02 | 12 | 10 | 1 | 17 | 16 | 2 | 25 | 1 |
| 23221 | 12 | 12 | 20 | 01 | 18 | 14 | 3 | 23 | 2 |
| 19231 | 1 | 12 | 22 | 00 | 19 | 13 | 3 | 23 | 2 |
| 25272 | 02 | 12 | 30 | 12 | 0 | 16 | 2 | 22 | 2 |
| 24251 | 1 | 12 | 21 | 21 | 21 | 18 | 2 | 22 | 2 |
| 23261 | 1 | 22 | 12 | 10 | 22 | 16 | 2 | 22 | 2 |
| 26262 | 10 | 22 | 25 | 1 | 23 | 15 | 2 | 25 | 1 |
| 19191 | 2 | 10 | 2 | 1 | 11 | 24 | 16 | 2 | 23 |
| 23252 | 10 | 21 | 2 | 10 | 25 | 12 | 3 | 22 | 2 |
| 23222 | 10 | 21 | 2 | 10 | 26 | 18 | 2 | 26 | 1 |
| 24241 | 1 | 12 | 1 | 40 | 27 | 11 | 3 | 18 | 3 |
| 21261 | 1 | 12 | 1 | 1 | 0 | 28 | 17 | 2 | 25 |
| 21221 | 1 | 1 | 12 | 1 | 1 | 29 | 12 | 3 | 22 |
| 21221 | 1 | 12 | 1 | 0 | 0 | 30 | 19 | 1 | 30 |
| 25252 | 10 | 21 | 2 | 10 | 31 | 19 | 1 | 24 | 2 |
| 24222 | 10 | 1 | 12 | 31 | 32 | 15 | 2 | 27 | 1 |
| 21211 | 1 | 1 | 12 | 20 | 0 | 33 | 21 | 1 | 27 |
| 21211 | 1 | 1 | 12 | 20 | 0 | 34 | 15 | 2 | 25 |
| 20211 | 1 | 1 | 13 | 10 | 0 | 35 | 15 | 2 | 22 |
| 19221 | 1 | 12 | 22 | 1 | 1 | 36 | 17 | 2 | 15 |
| 23262 | 10 | 22 | 20 | 1 | 37 | 14 | 3 | 18 | 3 |
| 22232 | 10 | 21 | 24 | 1 | 38 | 20 | 1 | 20 | 3 |
| 23262 | 10 | 12 | 23 | 1 | 39 | 19 | 1 | 26 | 1 |
| 29292 | 10 | 22 | 25 | 20 | 40 | 23 | 1 | 23 | 2 |
| 30312 | 10 | 21 | 29 | 21 | 41 | 19 | 1 | 26 | 1 |
| 21232 | 10 | 12 | 22 | 20 | 42 | 40 | 1 | 19 | 3 |
| 22241 | 1 | 22 | 22 | 10 | 43 | 13 | 3 | 20 | 3 |
| 23242 | 10 | 2 | 1 | 22 | 0 | 44 | 17 | 2 | 32 |
| 23242 | 10 | 22 | 20 | 0 | 45 | 21 | 1 | 26 | 1 |
| 20202 | 12 | 1 | 12 | 10 | 46 | 17 | 2 | 25 | 1 |
| 20232 | 10 | 21 | 2 | 11 | 1 | 47 | 17 | 2 | 21 |
| 24262 | 10 | 1 | 12 | 20 | 0 | 48 | 17 | 2 | 23 |
| 22212 | 10 | 1 | 12 | 10 | 0 | 49 | 15 | 2 | 27 |
| 25282 | 10 | 2 | 12 | 20 | 0 | 50 | 17 | 2 | 21 |
| 22222 | 10 | 1 | 12 | 10 | 1 | 51 | 10 | 3 | 25 |
| 25261 | 1 | 22 | 22 | 10 | 52 | 17 | 2 | 23 | 2 |
| 28312 | 10 | 21 | 22 | 0 | 53 | 17 | 2 | 23 | 2 |
| 27272 | 10 | 2 | 12 | 31 | 54 | 12 | 3 | 24 | 2 |
| 19221 | 1 | 1 | 12 | 20 | 0 | 55 | 18 | 2 | 25 |
| 20231 | 1 | 1 | 22 | 20 | 0 | 56 | 13 | 3 | 25 |
| 21222 | 10 | 1 | 1 | 12 | 1 | 57 | 19 | 1 | 24 |
| 24251 | 1 | 22 | 1 | 22 | 0 | 58 | 18 | 2 | 26 |
| 27332 | 10 | 21 | 26 | 1 | 59 | 17 | 2 | 18 | 3 |
| 24262 | 10 | 21 | 20 | 0 | 60 | 14 | 3 | 24 | 2 |
| 23262 | 10 | 21 | 2 | 10 | 61 | 14 | 3 | 26 | 1 |
| 21221 | 1 | 1 | 12 | 20 | 0 | 62 | 19 | 1 | 25 |
| 26262 | 10 | 2 | 12 | 50 | 63 | 15 | 2 | 24 | 2 |
| 23232 | 10 | 1 | 1 | 20 | 0 | 64 | 15 | 2 | 24 | 2 |
| 22232 | 10 | 21 | 2 | 1 | 1 | 65 | 19 | 1 | 25 | 1 |
| 32312 | 10 | 22 | 29 | 2 | 66 | 17 | 2 | 28 | 1 |
| 27331 | 1 | 22 | 22 | 21 | 67 | 29 | 1 | 15 | 3 |

| | | | |
|---|---|---|---|
| 155 | 159 | 151 | 151 |
| 140 | 136 | 145 | 136 |
| 153 | 152 | 153 | 152 |
| 146 | 135 | 157 | 135 |
| 165 | 159 | 174 | 159 |
| 160 | 157 | 164 | 157 |
| 135 | 143 | 127 | 127 |
| 084 | 084 | 084 | 084 |
| 130 | 135 | 125 | 125 |
| 154 | 165 | 144 | 144 |
| 172 | 159 | 186 | 159 |
| 132 | 111 | 153 | 111 |
| 104 | 124 | 085 | 085 |
| 143 | 128 | 159 | 128 |
| 159 | 136 | 183 | 136 |
| 110 | 121 | 099 | 099 |
| 142 | 139 | 145 | 139 |
| 146 | 146 | 147 | 146 |
| 159 | 161 | 157 | 157 |
| 153 | 159 | 148 | 148 |
| 133 | 128 | 139 | 128 |
| 132 | 118 | 147 | 118 |
| 128 | 129 | 128 | 128 |
| 130 | 144 | 116 | 116 |
| 146 | 140 | 153 | 140 |
| 166 | 156 | 177 | 156 |
| 145 | 120 | 170 | 120 |
| 141 | 140 | 142 | 140 |
| 144 | 138 | 151 | 138 |
| 143 | 138 | 148 | 138 |
| 118 | 111 | 126 | 111 |
| 153 | 146 | 160 | 146 |
| 132 | 112 | 152 | 112 |
| 150 | 139 | 162 | 139 |
| 120 | 094 | 147 | 094 |
| 146 | 147 | 146 | 146 |
| 134 | 132 | 137 | 132 |
| 149 | 146 | 152 | 146 |
| 148 | 143 | 153 | 143 |
| 181 | 179 | 183 | 179 |
| 144 | 156 | 132 | 132 |
| 157 | 149 | 165 | 149 |
| 167 | 165 | 169 | 165 |
| 153 | 143 | 164 | 143 |
| 134 | 123 | 145 | 123 |
| 131 | 133 | 130 | 130 |
| 168 | 165 | 172 | 165 |
| 178 | 161 | 175 | 161 |
| 119 | 117 | 121 | 117 |
| 160 | 146 | 174 | 146 |
| 141 | 140 | 143 | 140 |
| 149 | 153 | 145 | 145 |
| 160 | 146 | 175 | 146 |
| 137 | 142 | 133 | 133 |
| 090 | 099 | 082 | 082 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2222111122211 | 68 | 15 | 2 | 26 | 1 | 140 | 140 | 140 | 140 |
| 2426210222511 | 69 | 21 | 1 | 23 | 2 | 126 | 119 | 134 | 119 |
| 2731210212401 | 70 | 20 | 1 | 24 | 2 | 155 | 154 | 156 | 154 |
| 2323210212221 | 71 | 14 | 3 | 23 | 1 | 158 | 175 | 142 | 142 |
| 2828210228721 | 72 | 16 | 2 | 23 | 2 | 143 | 152 | 134 | 134 |
| 2728210212611 | 73 | 20 | 1 | 25 | 1 | 154 | 147 | 161 | 147 |
| 2322210112201 | 74 | 17 | 2 | 22 | 3 | 140 | 141 | 140 | 140 |
| 1921111122101 | 75 | 15 | 2 | 23 | 2 | 131 | 134 | 129 | 129 |
| 1924111222101 | 76 | 15 | 2 | 21 | 3 | 140 | 149 | 132 | 132 |
| 2526210212201 | 77 | 16 | 2 | 17 | 3 | 155 | 157 | 153 | 153 |
| 2121111121101 | 78 | 16 | 2 | 22 | 2 | 140 | 136 | 145 | 136 |
| 2121210122111 | 79 | 18 | 2 | 27 | 1 | 138 | 142 | 128 | 128 |
| 2528210212511 | 80 | 16 | 2 | 21 | 3 | 133 | 104 | 162 | 104 |
| 2325112222321 | 81 | 14 | 3 | 23 | 2 | 140 | 153 | 128 | 128 |

# APPENDIX F

APPENDIX F

STATISTICS RELATED TO SELECTED VARIABLES

| Variable | Minimum Value | Maximum Value | Mean | Standard Deviation | Sum |
|---|---|---|---|---|---|
| Wifes Age | 18.0 | 50.0 | 23.519 | 4.139 | 4257.0 |
| Husbands Age | 19.0 | 48.0 | 24.779 | 4.401 | 4485.0 |
| Years Married | 0.0 | 9.0 | 2.088 | 2.184 | 378.0 |
| Number of Children | 0.0 | 3.0 | 0.442 | 0.702 | 80.0 |
| Husband's Mf | 8.0 | 29.0 | 16.541 | 3.038 | 2994.0 |
| Wife's Mf | 15.0 | 32.0 | 23.271 | 2.857 | 4212.0 |
| Husband's F-MA | 82.0 | 183.0 | 137.917 | 18.266 | 24963.0 |
| Wife's F-MA | 64.0 | 186.0 | 142.967 | 21.586 | 25877.0 |
| Low F-MA | 64.0 | 179.0 | 132.403 | 18.828 | 23965.0 |

# APPENDIX G

APPENDIX G

INDEX OF DISCRIMINGATION VALUES

| Item number | Mf SCALE | | FCI | |
|---|---|---|---|---|
| | husband | wife | husband | wife |
| 1 | 6 | 2 | 14 | 25 |
| 2 | 35 | 13 | 37 | 39 |
| 3 | 12 | 23 | 18 | 23 |
| 4 | 29 | 20 | 33 | 46 |
| 5 | 8 | 9 | 47 | 58 |
| 6 | omit | omit | omit | omit |
| 7 | 39 | 23 | 33 | 52 |
| 8 | 14 | 17 | 33 | 21 |
| 9 | 10 | 4 | 32 | 21 |
| 10 | 4 | 13 | 35 | 33 |
| 11 | 14 | 29 | 10 | 4 |
| 12 | omit | omit | omit | omit |
| 13 | 29 | 9 | 55 | 67 |
| 14 | 23 | 4 | 49 | 44 |
| 15 | 35 | 25 | 43 | 46 |
| 16 | 10 | 15 | 51 | 48 |
| 17 | 16 | 17 | 29 | 31 |
| 18 | omit | omit | omit | omit |
| 19 | 30 | 27 | 45 | 34 |
| 20 | 6 | 11 | 39 | 35 |
| 21 | 8 | 3 | 57 | 27 |
| 22 | 47 | 34 | 51 | 60 |
| 23 | 39 | 19 | 27 | 44 |
| 24 | omit | omit | omit | omit |
| 25 | 4 | 7 | 41 | 52 |
| 26 | 24 | 31 | 55 | 56 |
| 27 | 19 | 6 | 39 | 56 |
| 28 | 14 | 25 | 27 | 29 |
| 29 | 12 | 2 | 51 | 48 |
| 30 | omit | omit | omit | omit |
| 31 | 37 | 27 | 25 | 29 |
| 32 | 20 | 27 | 25 | 34 |
| 33 | 30 | 13 | 25 | 29 |
| 34 | 39 | 23 | 51 | 33 |
| 35 | 0 | 36 | 13 | 37 |
| 36 | omit | omit | omit | omit |
| 37 | 17 | 16 | 29 | 46 |
| 38 | 12 | 25 | 8 | 19 |
| 39 | 17 | 35 | 20 | 27 |
| 40 | 35 | 8 | 15 | 40 |
| 41 | 29 | 23 | 51 | 46 |
| 42 | 23 | 25 | omi5 | omit |
| 43 | 25 | 5 | 33 | 50 |
| 44 | 10 | 21 | 33 | 42 |
| 45 | omit | omit | 49 | 44 |
| 46 | | | 24 | 40 |
| 47 | | | 31 | 52 |
| 48 | | | omit | omit |
| 49 | | | 12 | 17 |
| 50 | | | 53 | 56 |

| Item number | FCI | |
|---|---|---|
| | husband | wife |
| 51 | 33 | 38 |
| 52 | 24 | 25 |
| 53 | 33 | 29 |
| 54 | 39 | 40 |
| 55 | 29 | 48 |
| 56 | 51 | 38 |
| 57 | omit | omit |