Sex-Role Attitudes, Sex, and Logos of Control: A Study of their Interrelationships in Reference to Social Change

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SEX-ROLE ATTITUDES, SEX, AND LOCUS OF CONTROL:
A STUDY OF THEIR INTERRELATIONSHIPS
IN REFERENCE TO SOCIAL CHANGE

by

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A Dissertation
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SEX-ROLE ATTITUDES, SEX, AND LOCUS OF CONTROL:  
A STUDY OF THEIR INTERRELATIONSHIPS  
IN REFERENCE TO SOCIAL CHANGE

Virginia de Oliveira-Alves, Ed.D.  
Western Michigan University, 1990

The present research was a partial replication of an earlier research concerning the discrimination of sex-role egalitarianism from attitude toward feminism. This study examined the relationships between these sex-role attitudes and sex, and between the former and locus of control, in reference to the social changes of the late 1960s and early 1970s. The subjects were female and male college students.

The results indicated that the sample was average in sex-role egalitarianism. It was more liberal on attitude toward feminism than a previous research sample. The sex-role attitudes were found to be directly related: when subjects were egalitarian, they also tended to be feminist, and vice-versa. This coherence was greater among females, who were also more liberal on both attitudinal dimensions. Locus of control was not a predictor of sex-role attitudes. A previously reported trend in locus of control toward externality was found to have leveled off. The externality of the present sample was associated with interpersonal and political issues.

The results suggested that college students may be more
receptive to sex equality of rights, but as concerns interpersonal aspects of roles, they are neither traditional nor nontraditional. Female students tend to be more receptive to sex-role changes, possibly because (a) their roles reflect a subordinate social position, and (b) they already see women performing nontraditional roles.

Regarding locus of control, college students seem to hold traditional beliefs about success, even when they believe in external control in other areas. Their beliefs possibly reflect a more conservative social climate and accommodation to the changes of previous decades. Sex is a predictor of sex-role attitudes, and may contribute to the association of sex-role attitudes with a third variable. Locus of control is not a predictor, perhaps because it is unrelated to sex.

The present study is relevant to the counseling of couples, women with personal-identity and work concerns, and college students in general with interpersonal concerns.
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Sex-role attitudes, sex, and locus of control: A study of their interrelationships in reference to social change

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Western Michigan University, 1990
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Virginia de Oliveira-Alves
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CHAPTER I

INTRODUCTION

Statement of the Problem

The major social events of the late 1960s and early 1970s in American society have affected sex-role attitudes. Individuals have become more accepting of nontraditional roles for women and men (Phares, 1984). The present dissertation research is an examination of two sex-role attitudes, sex-role egalitarianism and attitude toward feminism (feminist issues) in the light of social change. One purpose of this research is to examine the relationship between these two sex-role attitudes, and to find out whether two other variables, sex and locus of control, are related to, that is, are predictors of sex-role egalitarianism (SRE) and attitude toward feminism (ATF).

The present research is a partial replication of King and King's (1986) research on the discrimination of sex-role egalitarianism from feminism. In the present research, the attitude toward feminism was measured by a scale different from the one used by King and King. In addition, the present study includes a more specific focus on the effect of locus of control on the expression of sex-role egalitarianism and of attitude toward feminist issues.

Locus of control is a personality dimension described in Julian Rotter's (1966) social learning theory. This personality
dimension is conceptualized as a continuum of control. One end of the continuum concerns internality (internal control), and the other end concerns externality (external control). Internal locus of control has to do with the belief that the outcomes of one's behavior are determined by what one does. External locus of control has to do with the belief that behavioral outcomes are controlled by external factors.

The other purpose of the present research is to find out whether college students are liberal or becoming more liberal toward sex-role changes, and more external in their locus of control; and, if the evidence shows that locus of control is becoming more external as previous findings indicate (Cellini & Kantorowski, 1982), in what respect their locus of control is external. The change in locus of control is examined along with sex-role change as a way of gathering information about the effect of social factors on cognitive changes.

Importance of the Present Research for Counseling Psychology

The study of sex-role attitudes is important to counseling psychology because these attitudes are increasingly recognized as central to personality development and function. Sex-role attitudes are particularly relevant to identity issues. The acquisition of sex-role behaviors and attitudes leads to a sense of self (Block, 1973). In addition, the study of sex-role attitudes enables counseling psychologists to examine behavior in terms of the interaction between personality processes and social factors.
The present research is especially relevant to the couples counseling situation, as well as to the counseling of women. The application of knowledge about sex-role attitudes and the changes in these attitudes in the couples counseling context may facilitate the negotiation of mutual expectations between the individuals involved, as well as their interpersonal adjustment. This knowledge is applicable in the counseling of women, especially in cases where they are grappling with questions related to identity issues, such as the one concerning marriage and family, on the one hand, and career, on the other. This knowledge is also relevant to the counseling of men when they are also attempting to adjust to sex-role changes.

The concern with locus of control in the present research is also relevant to individual counseling. Information about the locus of control of individuals may reveal possible sources of anxiety, as reflected by a possibly impaired sense of control over given events in their lives.

Definition of Terms

There are ten main terms or concepts relevant to this research.

*Attitude*

Attitudes are generally thought to be opinions and long-standing judgments, which, as Mednick, Higgins, and Kirschenbaum (1975) indicated, operate as predispositions for specific action, and for responding to something specific in the environment. In
addition to the cognitive (opinion/belief) and the behavioral (action/response) aspects, attitudes also have an affective component. The latter is stressed in Bem's (1970) definition of attitudes as "likes and dislikes," or the individual's affinities for and aversions to "situations, objects, persons, groups, or any other identifiable aspect of our environment, including abstract ideas and social policies" (p. 14). The association of the cognitive aspect of attitude with behavior, that is, the dispositional character of attitudes, is stressed in Sherif and Sherif's (1967) definition of attitude as "the individual's set of categories for evaluating a stimulus domain" (p. 115). As cited by Greenwald (1968), Krech, Crutchfield, and Ballachy indicated that such evaluations can be positive or negative, and the corresponding action towards a given stimulus will be either pro or con. The evaluations and the action taken reflect the individual's likes and dislikes, or the affective component of attitudes.

Sex-Role Egalitarianism

Sex-role egalitarianism is an attitude toward the roles of women and men (King & King, 1986). Individuals of an egalitarian orientation relate to others impartially. They do not judge others on the basis of sex.

Attitude Toward Feminism

Attitude toward feminism is an attitude toward changes in sex role. This attitude is measured by the Attitude Toward Feminist
Issues Scale. This scale was validated in a study by Elmore, Brodsky, and Naffziger (1975).

Expectancy

Expectancy is one of the central concepts in Rotter's social learning theory (Phares, 1984). It refers to individuals' estimation, or their anticipation, of the outcomes of their behaviors. According to Rotter, individuals hold beliefs about the consequences of their behavior, and these beliefs have an effect on the frequency or likelihood of occurrence of behavior. If individuals believe that positive consequences will follow behavior, the behavior is likely to occur. Rotter also thought that expectancies can be generalized, when they apply to several situations, and specific, when they concern specific situations (Phares, 1984).

Locus of Control

Locus of control is a personality dimension about the expectancies of individuals (Strickland, 1977). It refers to the beliefs about what controls the outcome of behavior. It has two forms, internal locus of control and external locus of control. Internal locus of control involves the belief that the events of one's life are contingent upon what one does. External control has to do with the belief that these events are controlled by external factors, such as luck, chance, powerful others, or forces beyond one's control.
Construct

A construct is the conceptual target at which measuring operations are aimed. It is a label, a word that refers to a domain of psychological (behavioral, cognitive, and/or affective) events.

Validity

Validity is defined as an indication of the degree to which a measure does what it is intended to do. Thus, it concerns the scientific adequacy of measuring instruments. Cook and Campbell (1979) contended that validity and invalidity "refer to the best available approximation of the truth or falsity of propositions" (p. 37). Validity denotes adequacy of given operational representations.

Construct Validity

The determination of construct validity answers the question of whether operations do represent a particular construct. It is also called trait validity (Campbell & Cook, 1979). Nunnally (1967) indicated that this type of validity concerns the measurement of psychological traits.

Discriminant Validity

Discriminant validity refers to the extent to which one construct differs from another. It is an estimate of the degree of "independence" of the construct. Operationally, it refers to the
degree to which variation in the measurements represents variations in the construct.

Convergent Validity

Convergent validity (convergence) is a type of validity found when different measures of the same trait correlate with one another.

Background and Importance of the Problem

Social Changes

Within the last two and a half decades the concern with social influences on behavior has intensified among counseling psychologists. The importance of social factors in personality and behavior is acknowledged in the entire field of psychology, as indicated by the recent resolutions of the American Psychological Association (1987) about graduate education. These resolutions include a directive for the study of the role of social processes and social change in behavior and personality functioning. This growing awareness appears to be a direct result of the impact of social and cultural events of the last two decades. These include the civil rights movement and subsequent increase in the participation of ethnic/racial minorities in American society; economic fluctuations seen in recession, high inflation, the energy crisis; political events such as the Vietnam War, and Watergate; international politics; the liberalization of social action, as manifested in changes in the sexual mores and dress codes; and the women's liberation movement and women's greater participation in areas
previously held to be the domain of men. The social, political, and economic events of recent history seem to have affected the way individuals behave and the way they think about themselves and others. These events have also affected the way psychology and other disciplines conduct inquiry into human behavior.

Sex Role and Sex Role Changes

The sociocultural transformation undergone by American society includes a change in sex roles and in attitudes towards sex roles, an area of inquiry of special interest to psychologists. McClelland (1975) indicated that sex role is an important determinant of behavior. Block (1973) stressed the importance of sex role for the understanding of personality functioning. For Block, sex-typed behavior or sexual identity results in more than the achievement of masculinity or femininity. It leads to a sense of self. This claim gives support to the assumption that the study of sex role issues is important to the areas of psychotherapy and counseling.

Attitude and Sex-Role Attitude

The study of attitudes also enhances the understanding of personality and behavior. This study has gradually come to the fore in the areas of counseling and clinical psychology, as the emphasis shifted from classical psychoanalysis to ego analysis, and as a general cognitive trend emerged in psychology. Karen Horney is among the personality theorists who first focused on the role of attitudes. According to Ford and Urban (1964), Horney defined
attitudes as "complex patterns of perceiving, thinking, and feeling that the person has acquired towards various people and things" (p. 493). Thus, attitudes represent fundamental aspects of cognition and personality. The stress on attitudes and attitude change also appears in a more recent social-psychological paradigm in counseling psychology. This paradigm involves the application of concepts from social psychology to problems in counseling psychology (Dorn, 1984a; Friedlander & Schwartz, 1985; Strong, 1968, 1982). The emphasis on attitude within this framework becomes apparent in the application of cognitive dissonance theory, which has been used as an explanation of change in therapy (Dorn, 1984a, 1984b; Strong, 1968, 1982). Attitudes are particularly useful in the assessment of the effects of social influences on behavior, cognition, and affect. The study of current sex roles and sex-role attitudes, for example, involves the examination of the effects of the changes that have occurred in women's roles as a result of the social and political events of the late 1960s and early 1970s, particularly the women's movement of that time.

The Impact of Social Change on Sex-Role Attitudes

In the United States the women's movement emerged in the late 1960s amidst a great deal of political activism. At the time, women became involved with the civil rights movement and other political movements. This involvement helped raise their consciousness about sex inequality, as well as develop the skills necessary to address institutional inequality affecting women (Andersen, 1983). Another
significant factor in the development of the women's movement was the expansion of higher education following the second World War. The growth of education gave women increased educational opportunity. As a result of becoming better educated, a greater number of women became more aware of their standing in society and began to get politically involved (Andersen, 1983; Chafe, 1977). Chafe contended that the movement toward racial equality and the women's movement were the two social events of greatest impact on norms and institutions in American society. The women's movement soon had an effect on sex-role attitudes. Survey results showed female and male college students becoming more liberal towards sex role during the period between 1970 and 1975 (Chafe, 1977).

An event of great significance in the transformation of sex role was the increase in women's participation in the labor force. In 1900 only 1/5 of all women worked for wages (Macionis, 1989). By the mid 1900s more than 40% of the total civilian labor force was female (Benokraitis & Peagin, 1986; Sapiro, 1986). In 1985 55.4% of the American women were participants in the work force (Macionis, 1989). Although a large percentage of these women were likely to have children that could be as young as six years old (62.4%, according to Macionis), factors such as low fertility rates owing, for example, to advances in contraceptive technology, delayed childbearing, delayed marriage, and childless marriages, are thought to have contributed to the greater participation of women in the job market (Chafe, 1977; Macionis, 1989; Rescroat & Shehan, 1984). According to the 1987 Bureau of the Census Report, in 1986
27.3% of women aged between 25 and 29 were childless, in contrast with 1960 when only 12.6% of women in that age bracket were in the same situation (Macionis, 1989). Other contributing factors included the expansion of the economy and consequent demand for a greater number of workers (Sapiro, 1986), as well as problems of the economy, such as high inflation. The problems made it difficult for couples to manage on only one income. All the aforementioned social movements had a significant impact on the lives of women, and on people's beliefs about the role of women.

The Study of Sex-Role Attitudes in Psychology

Psychologists have been trying to systematize the information about sex-role attitude change. Several sex-role issues have become the focus of attention. Two of these are the attitude towards feminist issues and sex-role egalitarianism. Sex-role egalitarianism is an attitudinal dimension concerning a disposition to respond to individuals without being influenced by their sex (Beere, King, Beere, & King, 1984; King & King, 1983). Individuals of an egalitarian orientation toward sex role are said to relate to others impartially, regardless of the other person's sex. Sex-role egalitarianism is therefore a non-sexist attitude toward women and men. Egalitarians do not use sex as a criterion for judging the behavior of other individuals. Sex-role egalitarianism has been conceptualized as a trait distinct from feminism or attitude toward feminism.

The Sex-Role Egalitarianism Scale (SRES), a measure of "atti-
tude toward the equality of males and females" (King & King, 1983, p. 435), was developed as a step towards the clarification of the cognitive processes having to do with sex role. In her criticism of many scales and measures of gender-related constructs, Beere (1979) addressed the lack of clarity in the definition or identification of gender-related traits or concepts. According to Beere, test developers in this area of inquiry do not always specify clearly the domain to be measured by their tests. The developers of the SRES tried to achieve greater precision, as well as to avoid other test construction problems (Beere et al., 1984).

In a study of the discriminant validity of the SRES, King and King (1986) tested the hypothesis that feminism reflects favorable opinions toward women only, whereas egalitarianism is an attitude towards the sex role of women and men. High egalitarianism (SRES) scores reflect impartiality towards women and men, not a favorable attitude toward women or men. As with all the studies on sex-role egalitarianism, these researchers used a sample of female and male subjects.

King and King found that the relationship between egalitarianism and feminism was curvilinear. The relationship between the two traits was also reported to be linear. According to King and King, linearity was expected because, as measured, the traits in question and one aspect in common: they both reflected attitudes towards women in nontraditional roles. Curvilinearity concerned the difference between egalitarianism and feminism. According to King and King, only the egalitarianism measure (SRES) addressed the...
attitudes towards men in nontraditional roles. Therefore, as conceptualized, higher SRES scores reflected endorsement of non-traditional roles for both women and men, and not only for women, as was the case with the feminism measure employed by King and King.

Hence, when the relationship between SRES and the feminism measure involved the upper end of SRES scores, "the relationship between the two attitudinal measures . . . [became] less positive or 'flattened out'" (p. 210). King and King reported a bivariate correlation coefficient of .71, an indication that the linear component of the relationship represented a 50% sharing of variance. They also reported a multiple-correlation coefficient of .73 for the curvilinear component of the relationship, indicating that in the case of curvilinearity there was a 53% sharing of variance between the two attitudinal measures. As indicated, King and King explained that only the SRES concerned attitudes towards women and men. Their findings as well as their rationale for the discrimination of sex-role egalitarianism were dependent on the way attitude toward feminism was measured and defined. They used the Attitude Toward Women Scale (AWS) (Spence & Helmreich, 1972), which is viewed as a measure of attitude toward women's role only. King and King defined the attitude toward feminism as the attitude toward women's roles and sex-role egalitarianism as the attitude toward the roles of women and men.

Another aspect in the distinction between sex-role egalitarianism and attitude toward feminism comes to the fore if another measure of attitude towards feminism, namely, the Attitude Toward
Feminist Issues Scale (ATFI) (Elmore et al., 1975), is considered. A review of the ATFI items indicates that, although similar to the AWS, the ATFI is more comprehensive. More importantly, the ATFI represents a view of feminism that involves large-scale changes in sex role. These changes in sex role involve the social structure. Furthermore, although references to women are more frequent in both ATFI and AWS, ATFI implicitly and explicitly addresses non-traditional roles for men as well as for women. First of all, being large in scale, the changes in sex role necessarily involve the position and behavior of men as well. More specifically, items such as number 40—"the work week should be shortened to open more jobs for women and to allow men more time to spend in their homes"—and number 53—"Care of children should be shared equally by both spouses"—address non-traditional roles for men directly.

All three scales (SRES, AWS, and ATFI) measure the extent to which individuals hold non-traditional views about sex roles. However, the AWS is more similar to the SRES in that both address sex roles in the context of interindividual relationships. Although the ATFI also deals with interpersonal relations, it goes beyond this concern and includes non-traditional views or beliefs about sex role at the institutional level, and in the context of equal rights and social and political structure. In this respect, it reflects beliefs about the larger group or about societal factors. It addresses the collectivity, and not only person-to-person issues. The ATFI addresses the following issues: the elimination of sex bias in the English language, the elimination of sex discrimination and
official enforcement of egalitarian measures in all institutions, at the local, national, and even international level. Items such as number 38—"Government loans and contracts available to minority businesses should be available to businesses run and owned by women"—and number 56—"The stereotypes and labels which women are socialized to accept in our society must be examined and overcome" are two examples of ATFI items that reflect a view of feminism that emphasizes rights, group issues and external factors.

On the other hand, the majority of the issues represented in the SRES are at the personal or interpersonal level, as demonstrated by item no. 65—"A marriage is more likely to be successful if the wife's needs are considered after the husband's needs." Some items refer to broader issues, as in number 18—"Men and women are equally qualified for law enforcement jobs"—but not in a clearly political way. Generally, the concern is not with the social structure. Item number 69—"Quality education benefits both men and women" may be an example of a belief about external, or broad, issues. However, in this item legislative/governmental intervention, the concern with the social context, does not seem to be as strong as it is in the ATFI. The major thrust in the AWS is also interpersonal or individualistic, as shown in item number 5—"Under ordinary circumstances, men should be expected to pay all the expenses while they are out on a date." The similarity between AWS and SRES regarding this personal (individualistic) element is suggested in King and King's (1986) statement that "persons with liberal sex-role attitudes [are] more individualistic and self-
reliant . . . and more internal [emphasis added] with regard to their achievement aspirations" (p. 211). Their conclusion was based on the correlations of SRES and AWS with eight personality trait scores (such as need for dominance). King and King reported that when SRES was related to a personality trait so was AWS. According to these researchers, the evidence was "modestly supportive of the convergent validity of the two attitudinal constructs" (p. 211).

In the present dissertation research and in light of the relative features of the three instruments discussed, ATFI was used instead of AWS. In addition, one of the variables included in the present analysis was sex. With respect to this variable, research results have shown men to be supportive of nontraditional sex roles for women (Chafe, 1977). However, men's acceptance of sex-role change has been found to involve general principles, rather than specific aspects of equality (Thornton & Freedman, 1979). Findings also indicate that, with respect to sex role and sex-role attitudes, women have changed more than men (Goode, 1982). Even when men endorse the participation of women in the labor force, they resist changes in their own role (Komarovsky, 1976; Macionis, 1989). In light of these findings, it becomes important to gather information about the way females and males differ in their beliefs about sex roles.

Another objective of the present research is to find out whether SRES is associated with one type of locus of control, and ATFI with a different type of locus of control. Findings from King and King's (1986) study of the discriminant validity of sex-role
egalitarianism shows locus of control to be a factor in the discrimination between egalitarianism and feminism. In King and King's study the analysis included the correlation of SRES, and of AWS, with Lefcourt, Von Bayer, Ware, and Cox's (1979) Multidimensional-Multiattributinal Causality Scale (the MMCS measures), a measure that assesses the locus of control for affiliation and achievement. SRES was found to contribute "an independent portion of the variance to achievement locus of control beyond that contributed by AWS" (King & King, 1986, p. 213). This finding was thought to lend support to the hypothesis that SRES and AWS measure distinct traits.

As indicated, in the present research the relationship between locus of control and sex-role attitudes is examined. In this research, locus of control was measured by Rotter's Internal-External Scale (I-E) (Rotter, 1966). This scale is a measure of locus of control, originally used as a unidimensional scale. It has also been used as a multidimensional variable in factor-analytic studies of I-E expectancies. The I-E dimensions or factors were found to be useful in the identification of locus of control styles of individuals who endorsed nontraditional views (Gurin, Gurin, Lao, & Beattie, 1969). In the present research both the unidimensional and the multidimensional measures were used.

In the majority of studies, locus of control has been used as a predictor, that is, as an independent variable. Researchers have also focused on its operation as a dependent variable. Regarding its operation as a dependent variable, observations and research findings indicate that individuals' perceived locus of
control has changed since 1966. Specifically, college students are reportedly becoming more external (Cellini & Kantorowski, 1982; Phares, 1984; Rotter, 1966); that is, in the 1980s college students were found to be less likely to view themselves in control of the events in their lives. In light of this change, it appears that the reassessment of college students' perceived locus of control provides further evidence for the notion that cognitive variables change in response to social events. In combination with the analysis of sex-role attitude change, the study of locus of control provides evidence of the cognitive processing of social influences. The present research examines the question of college students' increased externality. This examination is relevant to the study of sex-role attitudes. This connection is plausible in the sense that the factors which contributed to the movement towards sex (and racial) equality may have also contributed to a consciousness of institutional determinants of behavior, and therefore, to the shift in college students' outlook from internal to external control of behavioral outcomes.
CHAPTER II

REVIEW OF THE LITERATURE

The present research involves the relationships among four main variables: sex, sex-role egalitarianism (SRES), attitude toward feminism or feminist issues (ATFI), and locus of control (I-E). The review of the literature presented here addresses these variables. The two sex-role attitude variables, SRES and ATFI, are presented jointly. Sex is addressed in the context of the discussion about the other three variables.

Attitudes Toward Feminist Issues and Sex Roles

In the beginning of the 1970s psychologists developed a number of measures of attitudes toward women's issues. Beere (1979) identified 41 instruments for the assessment of attitudes towards various sex-role issues, such as marriage, sex-role equality, sexuality, the feminist movement. Beere noted that these attitudes scales are similar, not only because they have a similar purpose, but also because many of them share a common pool of items.

The Belief Patterns Scale for Measuring Attitudes Toward Feminism, a 1936 scale, is the prototype for these sex-role attitude tests (Beere, 1979). This measure has served as a basis for subsequent scales, notably the Attitude Toward Women Scale (AWS), which is the most widely used instrument of its kind (Beere, 1979).
Other attitude-toward-women scales are exemplified by Attitude Toward Working Mothers Scale (Tetenbaum, Lighter, & Travis, 1983) and the Scale for Measuring Managerial Attitudes Toward Women Executives (Dubno, Costas, Cannon, Wankel, & Emin, 1979). These measures clarify new concepts about attitudes toward sex roles.

Various studies have explored the relationship between attitudes towards feminist issues and specific problems, such as leadership (Britton & Elmore, 1976) and the effect of culture in attitudinal differentiation (Braun & Cheno, 1978). In the study of gender-related issues, the attitude scales have also been used to assess attitudinal change in response to cultural transformation over time and to experimental manipulation. As reported by Phares (1984), the findings from Goldberg’s 1968 study and from the 1971 research by Pheterson, Kiesler, and Goldberg showed that, as a whole, college women evaluated creative work (writing in Goldberg’s, and painting in Pheterson et al.’s) done by men more positively than they evaluated similar work by women. However, as reported by Rapin and Cooper (1980), these findings were not replicated in subsequent research.

Phares (1984) reported that research results indicate that attitudes toward sex role (and women) have become increasingly liberal. Rapin and Cooper’s (1980) study, for example, failed to show differences in the way feminists and nonfeminists (two categories determined through the use of Dempewolf’s 1973 Feminism II Scale) evaluate either female-stereotyped or male-stereotyped traits. According to Etaugh and Spandikow’s (1981) longitudinal
study of college students, attitudes toward women have become more liberal over time. This shift was found to be greater for attitudes toward women's educational/vocational rights than toward women's marital and maternal roles. Similarly, Farrell (1975) found "that the closer proposed changes in gender roles came to the home environment, the more the men opposed it" (p. 218). Other research findings indicated that when males said that they thought that their wives should have a career, they also stipulated conditions that greatly restricted the wives' actual attempts to pursue a career (Komarovsky, 1976).

The present study employed the Attitude Toward Feminist Issues Scale (ATFI), an instrument developed by Elmore, et al. (1975). The 120 items of the scale are based on the resolutions of the 1970 National Convention platform of the National Organization for Women. These items are grouped into the following nine categories (subcales): human reproduction, child care, politics and legislation, employment, overcoming self denigration, marriage and family, consciousness raising in media, religion, and education. This test provides a comprehensive coverage of individual feminist issues (Beere, 1979). Dempewollf's Feminism II Scale (Beere, 1979) is a similar measure of attitudes toward issues of the women's movement, but it is not as long or comprehensive as the ATFI. The ATFI is the longest of all the measures of feminist attitudes. The median test-retest reliability coefficient for the ATFI was reported as .80, and a median internal consistency coefficient was reported as .91 (Beere, 1979). Results of the validation study indicate
that a group of women's studies students tested had more positive attitudes toward feminist issues than did a group of introductory psychology students. Additionally, women in the study were more positive than their male counterparts on eight of the nine scales.

The egalitarian dimension will be measured by a ninety-five item measure called Sex-Role Egalitarianism Scale (SRES). The SRES items are grouped into the following five domains or subscales: marital roles, parental roles, employment roles, social-interpersonal-heterosexual roles, and educational roles. According to King and King (1983a), the five subscales are not assumed to be orthogonal. The function of these subscales is to enhance the content validity of the scale. Reliability coefficients for the subscales range from .81 to .91, and for the total scores from .88 to .97 (King and King, 1986). Validation efforts yielded evidence in support of two hypotheses: (1) that women and psychology students would score more egalitarian than men and business students, respectively; (2) that both student groups would be more egalitarian than senior citizens and police (Beere et al., 1984).

The Locus of Control Dimension

Locus of control, or the Internal-External construct (I-E), is a personality variable related to the expectancies of individuals (Strickland, 1977). Specifically, it refers to the beliefs about what controls the consequences of behavior. The study of this variable originated within the context of Julian Rotter's social learning theory, which combines reinforcement or behavior
theory and a cognitive framework (Strickland, 1977). Interest in this personality dimension stemmed from the concern with the influences on the likelihood of occurrence of behaviors. I-E has been conceptualized as having either one of the two forms, internal control or external control, the two ends of the locus of control continuum (Rotter, 1966). Internal control has to do with the belief that the outcomes in one's life are contingent upon what one does. Internal individuals believe that the outcomes of their behaviors are controlled by their behaviors, their skill, their ability, or their effort. External control describes the belief that outcomes are determined by external influences such as fate, chance, powerful others, or forces beyond one's control. In short, the internal-external control dimension refers to the extent to which individuals perceive what happens to them to be dependent upon their own doing, or to forces outside their control. This dimension was originally conceptualized as a generalized expectancy (Lefcourt, 1966). In 1966 Rotter published the Internal-External Scale, a measure of the I-E construct, which has traditionally been viewed as unidimensional (Phares, 1984).

The extensive research on the I-E dimension has examined the relationship of this construct to various behaviors and attitudes. In general, internality has been found to be related to high achievement, competence, interpersonal attraction, less susceptibility to social influence or pressure, and lower anxiety (Phares, 1984; Strickland, 1977). In view of these findings, the consensus has been that internality is more functional than exter-
nality (Strickland, 1977). Externality has been interpreted as a sign of a sense of powerlessness (Silverm & Nakamura, 1971).

However, reports indicate that college students' locus of control are becoming more external (Cellini & Kautorowski, 1982; Phares, 1984). Reports also show that individuals of an external orientation do not form a homogeneous group (Gurin et al., 1966; Hersch & Scheibe, 1967). In his review of the cross-cultural research on I-E, Dyal (1984) reported a 1979 study by Morelli, Krottinger, and Moore, in which it was hypothesized that externality would correlate positively with neuroticism as measured by Eysenck's Personality Inventory. According to Dyal, results of that study revealed that there was a positive correlation between neuroticism and externality only when externality meant a belief in chance (luck) as a source of control. Evidence for a positive correlation was not found when externality concerned a belief in the control of powerful others. Externality seems to include aspects that do not indicate maladjustment (Dyal, 1984; Levenson, 1974).

Studies have tested the assumption of uni-dimensionality of the I-E Scale and the definition of externality and internality (Gurin et al., 1969). With respect to dimensionality and the definition of externality and internality, the studies on the relationship between I-E and subcultural or nontraditional beliefs (such as ethnic, social-political involvement, race) have demonstrated the need for the internal and external orientations to be contextualized. Studies on dimensionality have used factor analysis as a way of developing subscales which have greater power than the original I-E
Scale to predict various types of nontraditional attitudes and behaviors. The research on the relationship between I-E beliefs and gender, cultural/racial differences, as well as between I-E and political activism, is relevant to the present dissertation research because of the focus on non-traditional beliefs. This body of I-E research is relevant also because it deals with the dimensionality of the I-E Scale, and as a result provides models for the use of this scale as a measure of a multidimensional (I-E) variable.

In general, the sexes have not been found to differ significantly on the I-E Scale. Most studies have reported similar means and standard deviations, and even similar factors from factor-analytic studies, for the female and male populations (Strickland, 1977; Strickland & Haley, 1980). However, Hochreich (1975) reported that differences in responding emerge when respondents are instructed to respond to the items on the I-E Scale in accordance with stereotypical notions of sex roles. Both female and male subjects instructed to respond as if they were "super male" had very internal scores. Conversely, when told to respond as "super female," subjects of both sexes received highly external scores. Hochreich added that the subjects' actual scores differed from the ones they received when responding according to same-sex stereotypes. Internality was found to be related to academic achievement for males, but not for females (Strickland, 1977; Strickland & Haley, 1980). Sex differences were more clearly discerned when the patterns of responses, rather than the overall scores, were compared. Strickland and Haley (1980) reported that females and males

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differed in the endorsement of eight I-E items. Females were more internal than males on items concerning attitudes about political influence. Their findings also showed that males were more inclined to endorse external items involving luck, while females endorsed more strongly external items having to do with personal influence.

In a study on racial differences and I-E, Lefcourt and Ladwig (1965) found that African-Americans were generally more external than whites. However, Lefcourt (1965) reported that although blacks were more external in situations requiring skill, they were more internal than whites in chance or risk-taking situations. According to Abramowitz (1973) and Phares (1984), both a 1963 study by Gore and Rotter and a 1965 study by Strickland provided evidence for a connection between the civil-rights activism of African-Americans and internal control on the I-E Scale. In spite of these findings, Abramowitz (1973) indicated that the question of the power of I-E to predict sociopolitical involvement was unresolved.

The meaning of internality and externality was addressed in Gurin's et al. study on race, activism, and the dimensions of the I-E Scale. Gurin et al. distinguished two major classes of I-E items, one having to do with items related to one's own life, and the other comprising the items about the cause of other people's successes and failures. These two categories reflect a "self-other" distinction. Gurin's et al. study focused on the predictive power of this distinction. In regard to the contextualization of I-E beliefs, Gurin and her associates considered the real-life factor of racial discrimination in the life of blacks as the proper context of
the I-E expectancies among blacks. These researchers included in their analysis an individual-versus-system distinction to clarify the meaning of external control. Their contention was that externality does not have to connote a belief in chance or fate as the main determinant of behavioral outcomes. As explained by these researchers, external control can instead imply the belief that the blame or the responsibility for behavior outcomes rests upon a faulty system. Further, Gurin et al. contended that for individuals who have experienced real-life obstacles, an internal orientation about the responsibility for their failures may be more damaging, or less functional, because it indicates intrapunitiveness, rather than personal efficacy, as it is usually assumed to indicate.

Gurin et al. tested the usefulness of the self-other distinction by factor analyzing the Rotter I-E Scale. This scale was expanded by the addition of three items of the Personal Efficacy Scale and new forced-choice items designed to reflect the race situation. This analysis resulted in two I-E factors, which were distinguished largely on the basis of whether or not an item was phrased in the first person. Factor I was termed Control Ideology, because items loading on it referred to people in general, or beliefs about the successes and failures of people in the culture at large. Only one of these items is in the first person. Gurin et al. explained that this factor shows the extent to which respondents endorse a traditional Protestant ethic, (i.e., the belief that hard work, effort, skill, and ability—as opposed to fate, luck, or the right breaks—are the determinants of success). Individuals en-
dorsing the Protestant ethic explanation of success are expected to be internal on Factor I items.

Factor II has to do with one's own life, and is therefore termed Personal Control. The five items loading on this factor are all in the first person. This factor is a measure of whether respondents believe that they are in control of their actions (internal control) or not (external control). Gurin's et al. study and related research (Sanger & Alker, 1972) showed this personal-ideological distinction to be a useful tool in the understanding of the relationship between nontraditional beliefs and locus of control. Gurin et al. explained that this distinction may not be typical of whites (mainstream groups), because among these individuals cultural beliefs are generally similar to those about what works for oneself. As an example of the differences between African-Americans and whites, it was found that among African-Americans internal control was associated with high academic achievement if it occurred in the personal sphere, but not when it came in association with ideological or cultural beliefs (Gurin et al., 1969).

Findings from later research with white subjects suggested greater similarity between African-Americans and whites on the relationship between locus of control and sociopolitical involvement. Like African Americans, white activists were found to hold external beliefs. In one of these studies (Fink & Hjelle, 1973), internal control was found to be correlated with the belief in the traditional American ideology (i.e., individualism or belief in
one's ability and effort as determinants of success, and the like), and externality with leftist views (the belief that institutions and impersonal bureaucracies manipulate individuals) as well as with greater activism. A high externality-sociopolitical activity/leftwing connection had already been reported by Silvern and Nakamura (1971), although they indicated that the associations applied only to male subjects. Contrary to Gurin's et al., Fink and Hjelle's and Silvern and Nakamura's studies did not employ the Rotter Scale as a multidimensional measure.

Gurin et al. factor analyzed the race ideology items added to the Rotter Scale separately. Two of the resulting factors, the individual-versus-system (discrimination)-blame factor and the individual-versus-collective (group)-action factor, are pertinent to the present dissertation research. On the basis of this second factor analysis results, it was concluded that individuals of an internal orientation believe that the individual, not the system, is responsible for successes and failures. Internal individuals prefer individual, rather than collective, action to combat racial discrimination. Respondents of an external orientation endorse the opposite view and prefer individual action. These findings also revealed that the willingness to engage in collective action is related to the system-blame factor, but not to the personal control factor. In addition, it was found that African-Americans of an external orientation were more effective and more innovative in their behavior (Gurin et al., 1969).

A subsequent test (Lao, 1970) of the personal-ideological
distinction, also using African-American subjects, showed that internality on the personal control factor was associated with general competence, and externality about cultural beliefs (system blame) correlated positively with innovative behavior. Lao also reported that those who blame the system showed greater involvement in, and commitment to, the civil rights movement and preferred collective to individual protest action. Her research provided further evidence in support of the independence of the personal and ideological levels.

Other studies have explored the factor structure of the I-E Scale. Mirels (1970) reported two factors, one involving personal outcome, or the extent to which individuals believe in personal mastery or their control over their own lives; and the other involving the belief about the impact of individuals on political institutions. Abramowitz (1973) reassessed the usefulness of Mirels' two dimensions in an investigation of sociopolitical activism and locus of control. He found the two factors to be uncorrelated (independent) and political commitment to be predicted by the political factor only. In another factor-analytic study, Levenson (1974) used the Rotter Scale as the basis for the development of three scales, one about internal control, another about control of powerful others, and the third about chance control (Internal Control Scale, Control of Powerful Others Scale, and Chance Control Scale).

In their examination of the relation between locus of control and involvement in the women's liberation movement, Sanger and
Alker (1972) compared a group of female activists and female non-activists. They found evidence for the dimensionality of the I-E measure, as well as support for the use of the multidimensional I-E Scale in the study of the relationship of locus of control with sex role issues. Sanger and Alker used Gurin's et al. two dimensions of locus of control, personal control and control ideology, but renamed the latter Protestant Ethic Ideology because most of the items involved refer to the nature of rewards in society. These items are similar to the Protestant Ethic personality variables identified by Mirels and Garrett (1971). Sanger and Alker also used a feminist ideology factor comprised of items similar to those in Gurin's et al. race ideology dimension.

In general agreement with Gurin et al.'s findings about blacks, results from the Sanger and Alker study indicated that individuals involved in the feminist movement scored on the external direction on the Protestant Ethic and the feminist ideology factors, and on the internal direction on the personal control dimension. That is to say, findings indicated that feminists rejected the Protestant Ethic while upholding internal beliefs with respect to their own life experience. Sanger and Alker's study showed further evidence in support of the self-other distinction and the assumption that the I-E locus of control is not a unitary personality dimension.

In sum, research findings indicate that individuals that hold nontraditional attitudes do not have the same locus of control expectancies for all domains or situations in their lives. These individuals appear to have an external orientation in regard to
cultural or societal issues, and an internal orientation concerning personal experiences. Gurin's et al. research and the replication studies indicated that these individuals reject individual-centered notions about general issues (general views on success in society), but show personal efficacy when it comes to personal situations. Regarding cultural beliefs, these individuals focus on the collectivity. Sanger and Alker (1972) indicated that although feminists are more likely than nonfeminists to believe that powerful others control things, feminists also believe that this influence can be overcome through collective effort, by joining forces with others to bring about structural, society-wide changes. Nonfeminists may believe in individualistic, personal strategies to overcome difficulties, but may also assume that gender-related problems are insoluble.
CHAPTER III

METHODOLOGY

Research Design

The present research involved the administration of three scales. Two of the scales administered were the Sex-Role Egalitarianism Scale (SRES) and the Attitude Toward Feminist Issues Scale (ATFI). The third scale administered was Rotter's Internal-External Scale (I-E scale). In this research the I-E scale was employed as a unidimensional and multidimensional scale. As a multidimensional scale, the I-E measure comprises the following dimensions or factors: Factor I, a Protestant-Ethic dimension, originally called Control Ideology; Factor II, a Personal Control dimension; and Factor III, a Feminism dimension.

One of the major purposes of the present research is twofold: (1) to examine the relationship between sex-role egalitarianism (as measured by SRES) and attitude toward feminism (as measured by ATFI) in light of social change, and (2) to find out whether two other variables, sex and locus of control, are predictors of sex-role egalitarianism (SRE) and attitude toward feminism (ATF): more specifically, whether females and males differ in their sex-role attitudes (SRE and ATF), as well as whether the relationship between locus of control and sex-role egalitarianism differs from the relationship between locus of control and attitude toward
feminism.

The other purpose of the present study is to find out whether college students are becoming more liberal toward sex-role changes, and more external in their locus of control; and, if the evidence shows that their locus of control is becoming more external, in what respect their locus of control is external.

The research questions investigated in the present research are as follows:

1. Is there any evidence to the effect that sex-role attitudes are becoming more liberal?

2. Is there evidence of a relationship between attitude toward feminism as measured by ATFI and sex-role egalitarianism as measured by SRES?

3. Do females and males differ significantly in their sex-role attitudes?

4. Is the relationship between the locus of control (I-E) scores and the scores on the Attitude Toward Feminism Scale different from the relationship between the I-E scores and the sex-role egalitarianism measure? Specifically, is externality more strongly associated with ATFI than with SRES? Further, is internality correspondingly more characteristic of SRES than of ATFI?

5. Is the evidence obtained in the present research consistent with the observations and findings showing that the locus of control of college students is becoming more external? Furthermore, what is the nature of externality on the present sample?
Hypotheses

The hypotheses investigated in the present research were as follows:

First Hypothesis

1.A. The evidence will show the present sample to be egalitarian. In operational terms, the SRES mean for the combined females and males sample will be higher than the two criteria of 237.5 and 370.

1.B. Attitude toward feminism will be more liberal than what previous research has shown. In operational terms, the ATFI mean for the combined group will be significantly more liberal (lower ATFI mean) than the mean for the comparable group in Elmore et al.'s validation study of the ATFI.

Data from a comparable sample for the evaluation of the present ATFI results come from a validation study of the ATFI (Elmore et al., 1975). In this study a group of 44 introductory psychology students was used. This group is comparable to the present sample because the latter was composed of female and male undergraduates from introductory psychology and sociology classes.

SRES data for a comparable group is not available. In the absence of such data, the following two reference points were used as general criteria in the evaluation of the present results: the SRES midpoint 237.5 (475 being the maximum SRES value) and a score of 370. The rationale for using the midpoint is that if the obtained mean score for the present sample were higher than the
midpoint, the implication would be that this sample would have been closer to the upper end of the SRES scores, the egalitarian end of the scale. If, on the other hand, the mean were below the midpoint, the implication would be that the present sample would have been closer to the nonegalitarian pole of the SRES.

The second criterion comes from a study by King and King (1983b). In King and King's study and in the present research, the population sampled was a college population. King and King used the SRES form B, not Form K, the one used in the present research. However, these are alternate forms, with equivalence coefficients ranging from .84 to .88 and averaging .86 in one study (King & King, 1983a), and, in another study (Beere et al., 1984), with an equivalence coefficient of .93. The evidence from King and King's research showed that subjects scoring above a score of 370 were more frequently in agreement with job decisions in favor of women, whereas those scoring below 370 tended to favor men. King and King noted that the partiality of low scorers was consistent with the conceptualization of sex-role egalitarianism (SRE), but the partiality of high scorers was not, because SRE is defined as an attitude of impartiality. However, given that favoring women (for job positions which are not usually associated with women) is not a traditional reaction, the 370 point appears to separate the traditionally-minded from the nontraditional.

The first hypothesis is consistent with reports that indicate that individuals are becoming more liberal toward sex role (Phares, 1984).
Second Hypothesis

2. In all three groups (females, males, and the combined group) sex-role egalitarianism (SRES) and attitude toward feminism (ATFI) will be positively related. Liberal views are indicated by high scores on SRES, and low scores on ATFI. Therefore, in operational terms the correlation between SRES and ATFI will be negative and significant.

A positive relationship between sex-role egalitarianism (SRES) and attitude toward feminism (ATFI) is indicated by a negative correlation between SRES and ATFI, because liberalism (or traditionalism) is not shown in the same way on the two measures (SRES and ATFI). Liberal views are associated with high scores on the SRES and with low scores on the ATFI. The rationale for the second hypothesis is that even though the SRES concerns views about sex role of a personal and individualist nature, and the ATFI concerns beliefs about sex role of a group (collectivist) and structural kinds, both scales are assumed to address the roles of women and men.

Third Hypothesis

3.A. Females will have a more egalitarian attitude toward sex role than males. In operational terms, the SRES mean score difference between females and males will be significant, with females scoring higher than males.

3.B. Females will have a more liberal attitude toward feminism than males. In operational terms, the ATFI mean difference between
females and males will be significant. The mean for the group of females will be lower (i.e., more liberal) than the one for the group of males.

These predictions are consistent with observations and research findings that indicate that women are frequently more liberal toward sex roles than men (Beere et al., 1984; Spence & Helmreich, 1972).

Fourth Hypothesis

This hypothesis has several parts. These parts address the relationships between each attitudinal scale and each I-E measure. The parts grouped as hypothesis 4.A refer to the SRES and those grouped as 4.B refer to the ATFI.

4.A.1. There will be an inverse relationship between sex-role egalitarianism and locus of control as a unidimensional variable. In operational terms, SRES will correlate negatively with the unidimensional I-E scales.

It is hypothesized here that egalitarians (high SRES scores) will have a more internal locus of control (low I-E scores), and nonegalitarians (low SRES scores) a more external locus of control (high I-E scores). This hypothesis is consistent with the assumption that sex-role egalitarianism is an individualistic orientation. It is also consistent with King and King's (1986) findings indicating that subjects scoring high on the Sex-Role Egalitarianism Scale were "more individualistic and self-reliant . . . and more internal with regard to their achievement aspirations" (p. 211).
4.A.2. There will be an inverse relationship between sex-role egalitarianism and the Protestant Ethic dimension of locus of control. In operational terms, the correlation between SRES and Factor I (Protestant Ethic) will be negative.

This hypothesis is consistent with the assumption that both high egalitarianism (high SRES scores) and internality on Factor I (low scores) represent an individualist orientation. Conversely, low egalitarianism (low SRES scores) and externality on Factor I (high scores) represent a nonindividualist orientation.

4.A.3. There will be an inverse relationship between sex-role egalitarianism and the personal-control dimension of locus of control. High egalitarianism will be associated with an internal personal control dimension, and low egalitarianism with an external personal control dimension. In operational terms, the correlation between SRES and Factor II (Personal Control) will be negative.

It is hypothesized here that the higher (liberal) SRES scores will be associated with internality (low scores) on Factor II. It is also expected that low (traditional) SRES scores will be associated with externality (high scores) on Factor II. The expectation of this pattern of association between SRES and Factor II is consistent with the assumption of egalitarianism as an individualist orientation.

4.A.4. There will be an inverse relationship between sex-role egalitarianism and the feminism dimension of locus of control. High egalitarianism will be associated with internality on this dimension and low egalitarianism with externality on the same dimension. In
operational terms, the correlation between SRES and Factor III (Feminism) will be negative.

Internality (low scores) on Factor III is assumed to reflect a belief that the individual (lack of skill or training) is to blame for the problem of sex inequality. Internality on this factor is also assumed to reflect a belief that individual action (training, personal effort) is the appropriate and effective way to resolve inequality problems. Externality (high scores) on this factor is assumed to reflect a belief that structural problems (discrimination) are to blame, and that group (political) action is best. The hypothesis of the association of internality on this factor and high egalitarianism is consistent with the assumptions in this research about the nature of SRES.

4.B.1. There will be no significant relationship between attitude toward feminism (ATFI) and locus of control (I-E) as a unidimensional variable (the original and modified scales).

Research findings showed that nontraditional views are associated with generally external locus of control views (Fink & Hjelle, 1973). Findings also showed that a liberal attitude toward feminism is associated with internal views about personal issues and external views about cultural issues (Sanger & Alker, 1972). Research findings about feminism suggested that the unidimensional scale may not reveal the relationship between locus of control and attitude toward feminism.

4.B.2. The relationship between attitude toward feminism (ATFI) and the Protestant Ethic dimension of locus of control
(Factor I) will be inverse. A liberal attitude toward feminism will be associated with an external locus of control about Protestant Ethic, and a traditional attitude with an internal locus of control. Therefore, a liberal attitude will be associated with the rejection (implied in externality) of the Protestant Ethic. In operational terms, ATFI will correlate negatively with the I-E Factor I (Protestant Ethic).

High scores on the ATFI represent a nonfeminist (traditional) attitude, whereas low ATFI scores reflect a feminist (liberal) attitude. High scores on Factor I reflect externality, whereas low scores on this factor represent internality. The hypothesis in question concerns the association of a liberal ATFI with externality on Factor I and a nonliberal ATFI with internality on the same factor. The hypothesized association is consistent with Sanger and Alker's (1972) findings that a feminist attitude is associated with external cultural beliefs (Factor I).

4.B.3. Attitude toward feminism (ATFI) will be positively related to the personal control dimension of locus of control (Factor II). A liberal attitude will be associated with an internal personal control, and a traditional attitude with an external locus of control. In operational terms, ATFI will correlate positively with Factor II (Personal Control).

The assumption in this hypothesis is that a liberal ATFI (low scores) will be associated with internality on the Personal Control Factor (low scores). This assumption is consistent with previous research findings (Sanger & Alker, 1972).
4.B.4. Attitude toward feminism (ATFI) will be inversely related to the feminism dimension of locus of control (Factor III). Therefore, a liberal attitude will be associated with externality, and a traditional attitude with internality. In operational terms, the ATFI will correlate negatively with Factor III (Feminism).

The assumption in this hypothesis is that a liberal ATFI (low scores) will be associated with a belief that (1) structural problems (discrimination) are to blame for sex inequality, and (2) group (political) as opposed to personal/individualist, action is best. This hypothesis is consistent with the assumption that a liberal ATFI and externality on Factor III (high scores) reflect structural and group-oriented (i.e., collectivist, as opposed to individualist) issues.

Fifth Hypothesis

5. The results of the I-E original scale will be consistent with observations and findings indicating that college students are becoming more external in their locus of control (Cellini & Kantorowski, 1982; Rotter, 1975). The present results (i.e., the mean score) will be compared with the results from Rotter's 1966 study and Cellini and Kantorowski's 1982 study.

Population and Sample

Two hundred and five subjects from three midwestern universities were tested in this research. These subjects were undergraduate students in introductory psychology and sociology classes,
at Valparaiso University, Valparaiso, Indiana; Indiana University-Northwest, Gary, Indiana; and Purdue University-Calumet, Hammond, Indiana. The present research was announced in these classes. Participation was voluntary.

There were 116 females and 88 males in the sample. One subject was not included in the analysis when the sample was split into a female group and a male group. This subject failed to indicate her/his sex during the testing. Additional demographic information (year in school, age, and marital status) is presented in Table 1. The sample was largely young (67.3% were 20 or younger). A little over half was in the Freshman year in school, and the greater majority (82.9%) was single.

Table 1

<table>
<thead>
<tr>
<th>Year in school</th>
<th>No. of cases</th>
<th>%</th>
<th>Age</th>
<th>No. of cases</th>
<th>%</th>
<th>Marital status</th>
<th>No. of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh.</td>
<td>112</td>
<td>54.6</td>
<td>Up to 20</td>
<td>138</td>
<td>67.3</td>
<td>Single</td>
<td>170</td>
<td>82.9</td>
</tr>
<tr>
<td>Soph.</td>
<td>57</td>
<td>27.8</td>
<td>21-30</td>
<td>45</td>
<td>22.0</td>
<td>Mar.</td>
<td>22</td>
<td>10.7</td>
</tr>
<tr>
<td>Jun.</td>
<td>19</td>
<td>9.3</td>
<td>31-40</td>
<td>14</td>
<td>6.8</td>
<td>Div.</td>
<td>4</td>
<td>2.0</td>
</tr>
<tr>
<td>Sen.</td>
<td>6</td>
<td>2.9</td>
<td>41-50</td>
<td>6</td>
<td>2.9</td>
<td>Sep.</td>
<td>5</td>
<td>2.4</td>
</tr>
<tr>
<td>Non-deg.</td>
<td>11</td>
<td>5.4</td>
<td>51+</td>
<td>2</td>
<td>1.0</td>
<td>Wid.</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>Grad.</td>
<td>0</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td>Miss.</td>
<td>2</td>
<td>1.0</td>
</tr>
</tbody>
</table>

a missing cases
Assessment Instruments

In this section the measures used will be described.

Personal Data Blank (PDB)

This a four-item form. The information requested consists of the year in school, sex age, and marital status. A copy of this form is presented in Appendix A.

Attitude Toward Feminist Issues Scale (ATFI)

This is a self-administered, 120-item instrument, made up of statements based on the resolution of the 1970 national convention platform of the National Organization of Women. Test items are grouped together into the following nine subscales: human reproduction, child care, politics and legislation, employment, overcoming self-denigration, marriage and family, consciousness raising in the media, religion, and education. Responses were scored according to a 5-point Likert scale, with A = strongly agree, B = agree, C = neutral, neither agree nor disagree, D = disagree, and E = strongly disagree. Maximum and minimum scores are 600 and 120, respectively. Strong overall agreement, shown in a low score, denotes a liberal, feminist attitude.

The median test-retest reliability coefficient was .80 (Beere, 1979), and the median internal consistency coefficient (alpha) was .91. In a validation study (Elmore et al., 1975), the subscale and the grand means for a group of women's studies students were
significantly \( (p < .05) \) lower (more liberal) than the same means for a group of psychology students. In the same study, females were significantly \( (p < .05) \) more liberal than males on the total score and all subscales, except childcare. It takes approximately 30 minutes to complete this scale. A copy of it is presented in Appendix B.

**Sex-Role Egalitarianism Scale (SRES)**

SRES is a paper and pencil, 95-item measure, scored on a 5-point Likert scale, ranging from strongly agree to strongly disagree. The most egalitarian response to each item receives a score of five points. The maximum and minimum scores are 475 and 95, respectively. High total scores indicate an egalitarian attitude toward sex role. There are two SRES forms, K and B. They are similar in content and scoring procedure. King and King (1986) used form K in their study of the discriminant validity of SRES. Form K was also used in the present study in order to insure consistency with King and King's study, which was the starting point for the present research. Internal consistency (reliability) estimates for both SRES forms was .97 (Beere et al., 1984). Concerning validity, Beere et al. (1984) found that women scored more egalitarian than men, and psychology students more egalitarian than business students. They also found that the two student groups scored more egalitarian than a group of senior citizens and another of police officers. It takes approximately 30 minutes to complete this scale. A copy of the SRES is presented in Appendix C. The
scoring key for Form K is presented in Appendix D.

Rotter's Internal-External Scale (I-E)

This measure was developed by Rotter and associates in 1966. It consists of 23 forced-choice items and six filler items. The six filler items were included in order to disguise the purpose of the test (Phares, 1984). The I-E scale places individuals on a dimension of personal control, with "internals" reporting that they believe they are responsible for the outcomes of their behavior, and "externals" reporting the belief that the outcomes of behavior are controlled by luck, chance or forces beyond their control. Rotter (1966) reported a test-retest (one month) reliability coefficient of .72, obtained on a group of college students and an internal consistency (reliability) coefficient of .70. For a validity coefficient, Rotter obtained a biserial correlation of .61 for the relationship of the I-E scale and a semi-structured interview about locus of control. Rotter also indicated that research findings showed the I-E to be distinct from variables such as intelligence and social desirability. It takes less than 30 minutes to complete this test.

In the present research I-E scale was used as a unidimensional and as a multidimensional measure. The multidimensional scale was developed in a factor-analytic study by Gurin et al. (1969). Two principal factors (or dimensions) were used: Factor I or Protestant Ethic (Control Ideology) and Factor II or Personal Control. These factors reflect Gurin's et al. distinction between self (Factor II)
and other (cultural beliefs, as measured in Factor I).

In Gurin's et al. study the I-E items 2, 11, 12, 16, 17, 28, 31, 35, 39, and 45 loaded on Factor I. Gurin et al. added three items on the Personal Efficacy Scale (PES) to the Rotter Scale. The PES items address beliefs about control over one's life. In Gurin et al.'s analysis these items loaded on Factor I. These PES items were added to the Rotter Scale in the present research as items 7, 9, and 20.

In Gurin's et al. study items 15, 21, 23, 38, and 43 loaded on Factor II. Although the entire I-E scale reflects the individual's self-efficacy (the belief in one's ability to carry out one's plans and to influence the course of events in one's life), Factor II seems to be an even more specific measure of self-efficacy, because it addresses beliefs concerning the self, as opposed to cultural issues.

Gurin et al. also tested a race ideology factor by adding new forced-choice items about locus of control with regard to race. Sanger and Alker (1972) tested a similar ideology factor concerning feminism. Sanger and Alker fashioned the feminist ideology factor items after Gurin's et al. race items. In the present research the I-E scale was also expanded by the addition of eleven new forced-choice items (items 4, 10, 14, 19, 24, 27, 30, 33, 37, 40, and 42), designed to measure a feminism factor (Factor III). These new items were adapted from Gurin et al.'s race items. They were designed in the present research to reflect non-traditional beliefs about sex role. They make two alternatives pos-
sible: (1) internal (individual-oriented); and (2) external (group or collectivity-oriented). These feminism factor items address two main issues, individual-versus-system (discrimination)-blame, and individual-versus-collective action (for change in women's position), the two categories first identified by Gurin et al. (1969) in relation to race. Internality on the Feminism Factor is associated with alternatives that show the individual to be responsible for (in control of) changes in sex role, as well as with alternatives expressing the views that sex-role changes require individual action. Externality on this factor is associated with alternatives that reflect the belief that the system is responsible for inequality, and collective, (as opposed to individual), action is best.

Gurin et al. modified one of the original I-E items. They repeated option A of the original item 6 with option B of the original item 16. Gurin's et al. new item is item 2 in the current research. They also paired option A of the original item 16 with a new option B. This new item is item 45 in the current research. In the present research the original item 6 was administered as item 11. All three items are part of Factor I.

In accordance with Sanger and Alker (1972), the added items were interspersed with the original I-E items. In effect, two I-E scales were used in the present research: the original (Rotter's) and the modified one (Gurin's et al.). The items for each scale and the factors were as follows:

Original scale: items 3, 5, 6, 8, 11, 12, 15, 16, 17, 18,
21, 23, 25, 26, 28, 31, 32, 34, 35, 38, 39, 43, 44. (Items 1, 13, 22, 29, 36, and 41 are fillers).

Modified scale: all of the above, except items 35 and 32, plus items 2 and 45.

Factor I (13 items): items 2, 7, 9, 11, 12, 16, 17, 20, 28, 31, 39, 45.

Factor II (5 items): items 15, 21, 23, 38, 43.

Factor III (11 items): items 4, 10, 14, 19, 24, 27, 30, 33, 37, 40, 42.

The score for each one of the I-E measures is the number of external options selected by respondents. That is, each external response receives a score of one. The higher the total score, the more external the respondent is. The lower the total score, the more internal the respondent is. Thus, a low score indicates internality (an internal locus of control) and a high score shows externality (an external locus of control).

A copy of the I-E Scale (including the factors) is presented in Appendix E.

Procedure

Following approval of the proposal for this research, clearance from the Human Subjects Institutional Review Board was obtained from Western Michigan University and the three schools sampled. Approval documents are presented in Appendix E. The study was announced in classes of introductory psychology and sociology. Participation was voluntary and the responses were anonymous.
Testing took place in one sitting, and lasted approximately one hour and thirty minutes.

General instructions given orally at the beginning of the testing session included a brief statement about the purpose of the study. The three measures were handed out to the subjects along with the answer sheets, the Personal Data Blank, and the General Instructions sheet containing the subject's identification number. The PDB was test 1, the SRES test 2, the I-E Scale test 3, and the ATFI test 4. These numbers were used also to identify the scales in the appropriate answer sheets. Subjects were instructed to complete the measures in the order that these were given, so as to insure uniformity in the administration of the scales. Subjects were also instructed to raise their hands whenever they finished one scale, so that the scale and the corresponding answer sheet could be collected. They were asked to keep the General Instructions form throughout the testing because it contained their identification number. This number was entered in all the answer sheets.

The verbatim instructions read to the subjects are presented in Appendix G (Oral Instructions). The written instructions (General Instructions) are presented in Appendix H.

Statistical Analysis

The mean and standard deviation on the SRES, I-E measures, and ATFI were obtained for the entire sample, and for females and males. The alpha reliability coefficient on each one of the three
I-E factors was obtained as well. Pearson correlation, t-tests, and a contingency table analysis were performed. The I-E Factor III (Feminism) was submitted to a principal-component analysis. The purpose of this factor analysis was to find out whether Factor III addresses the two components intended for it, the political or group-versus-individual action component, and the discrimination or structural-versus-individual-blame component.
CHAPTER IV

RESULTS

The administration of the seven measures, including the three subscales or factors of the I-E Scale, resulted in seven scores for each one of the 205 subjects. On the ATFI and the SRES only the total score was used in the statistical analysis. The tables show a discrepancy between the total N (205) for the combined (females and males) group and the sum (204) of females (166) plus males (38). This discrepancy is due to the exclusion of one of the subjects from the analysis when the sample was split into two subsamples, a sample of females and another of males. The subject excluded from the subgrouping did not specify the sex category in the prescribed way.

First Hypothesis, Part A:

1.A. The evidence will show the present sample to be egalitarian. In operational terms, the SRES mean for the combined females and males sample will be higher than the selected two criteria, 237.5, the SRES midpoint score, and the score of 370 from King and King's (1983b) study.

Measures of centrality and variability on the SRES for females, males, and the combined group are reported in Table 2.
Table 2

SRRES Means and Standard Deviations for Females, Males
and the Combined Group

<table>
<thead>
<tr>
<th></th>
<th>Combined</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>369.71</td>
<td>384.98</td>
<td>349.64</td>
</tr>
<tr>
<td>St. Deviation</td>
<td>42.28</td>
<td>35.69</td>
<td>42.30</td>
</tr>
<tr>
<td>N</td>
<td>205</td>
<td>116</td>
<td>88</td>
</tr>
</tbody>
</table>

The current SRRES mean for the combined group is well above (132.21 points) the midpoint, and only a small fraction (0.29) of a point below the score of 370. On the basis of the present SRRES result, the present sample seems to have scored egalitarian, that is, nontraditional toward sex role, in comparison with the SRRES midpoint, and nonegalitarian, that is, traditional toward sex role, in comparison with the score of 370. In King and King's (1983b) study, the score of 370 discriminated between the group of traditionally-oriented subjects and the group of nontraditionally-oriented subjects. On the basis of the present comparison, the present sample was average in egalitarianism, neither traditional nor nontraditional.

First Hypothesis, Part B:

1.B. Attitude toward feminism will be more liberal than previous research has shown. In operational terms, the ATFI mean for the combined group will be significantly lower (more liberal) than the selected criterion of the mean for the comparable group in
Elmore's et al. validation study of the ATFI.

Table 3 shows the current and the 1975 ATFI means and standard deviations for the combined group (females and males).

Table 3

<table>
<thead>
<tr>
<th>Current Sample</th>
<th>1975 Dataa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>271.56</td>
</tr>
<tr>
<td>St. Deviation</td>
<td>54.37</td>
</tr>
<tr>
<td>N</td>
<td>205</td>
</tr>
</tbody>
</table>

aGroup formed with students from an Introductory Psychology class.

The current mean was smaller than the 1975 one. A t-test comparing the current and the 1975 psychology means was performed. In this significance test the separate variance estimate with the correction for degrees of freedom (Blalock, 1979; Hays, 1973) was used instead of the pooled estimate. Although the pooled estimate is more efficient (Hays, 1973), the correction for the degrees of freedom and the separate estimate were employed because of the difference between N's. This decision was justified by the size of the 1975 sample (below 50). The mean difference between the 1975 sample and the current one was significant in a one-tailed test (t = -1.90, corrected df 67, p < .05). This result indicates that the present research sample responded with a more liberal attitude toward feminist issues than the 1975 psychology sample.
Second Hypothesis

2. In all groups (females, males, and the combined group) sex-role egalitarianism (SRES) and attitude toward feminism (ATFI) will be positively related. In operational terms, the correlation between SRES and ATFI will be negative and significant.

The positive relationship between egalitarianism and attitude toward feminism is indicated by a negative correlation between SRES and ATFI. These two scales are not scored in the same direction for either a liberal or a traditional attitude. Liberalism and traditionalism are always at opposite ends of the two scales.

Table 4 shows the correlation coefficients for the relationship between SRES and ATFI. In all three groups the coefficient is negative and significantly different from zero (p < .001). High scores on the SRES indicate a liberal attitude, whereas high scores on the ATFI indicate a traditional attitude. Low scores on the SRES indicate a traditional attitude, whereas low scores on the ATFI indicate a liberal attitude. A negative correlation between the

<table>
<thead>
<tr>
<th>Table 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation Coefficients for the Relationship Between SRES and ATFI for the Current Research Groups</td>
</tr>
<tr>
<td>Combined (205)</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>-.53*</td>
</tr>
</tbody>
</table>

*p < .001 one-tailed
SRSS and the ATFI indicate a positive relationship between the traits or dimensions measured by the two scales.

The present findings lend support to the hypothesis that the two scales measure related attitudes. The evidence reveals a tendency to respond in a similar liberal direction for subjects in the present sample on both instruments. This finding indicates a pattern of coherence for the two sex-role attitudes. These attitudes were more coherent in the group of females than in the group of males. Thus, subjects in the group of females and in the combined groups, more than in the group of males, were likely to be egalitarian when they were feminist, and feminist when they were egalitarian. Conversely, when these subjects were nonegalitarian, they also tended to be nonfeminist, and when they were non-feminist, they tended to be nonegalitarian.

Third Hypothesis, Parts A and B

3.A. Females will have a more egalitarian attitude toward sex-role than males. In operational terms, the SRES mean score difference between females and males will be significant.

As shown in Table 2, the SRES mean for females was 384.98 and the one for males 349.64. The mean difference between these two groups was significant ($t = 6.47$, df 202, $p < .01$, one-tailed), indicating that females in this sample responded in a more egalitarian or more liberal direction than males. This finding supports the hypothesis that females would be more egalitarian than males.

3.B. Females will have a more liberal attitude toward feminism
than males. In operational terms, the ATFI mean score difference between females and the males will be significant. The mean for the group of females will be lower (more liberal) than the mean for the group of males.

As shown in Table 5, the ATFI mean for the group of females is lower than the mean for males. The mean difference was significant in a one-tailed test of significance \( t = -6.60, \text{df} 202, p < .001 \).

<table>
<thead>
<tr>
<th>Table 5</th>
<th>ATFI Means and Standard Deviations for the Female and the Male Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Females</td>
</tr>
<tr>
<td>Mean</td>
<td>252.03</td>
</tr>
<tr>
<td>St. Deviation</td>
<td>53.26</td>
</tr>
<tr>
<td>N</td>
<td>116</td>
</tr>
</tbody>
</table>

In the present study females were more liberal toward feminist issues (feminism) than males. This finding supports the hypothesis about the difference between females and males in their ATFI responses.

**Fourth Hypothesis**

Part A. Part A of the fourth hypothesis is a group of four hypotheses concerned with the relationship between sex-role egalitarianism (SRES) and locus of control (I-E). It addresses the
correlation between SRES and the I-E measures.

Part B. Part B of the fourth hypothesis is a group of four hypotheses concerned with the relationship between attitude toward feminism (ATFI) and locus of control (I-E). It addresses the correlation between ATFI and the I-E measures.

The reliability coefficients for the three I-E factors used were not available before the present statistical analysis was done. Consequently, a reliability study was included in the present analysis. The obtained coefficients are discussed here prior to the examination of the correlation between the sex-role scales (SRES and ATFI) and these factors.

It is important for the interpretation of test results to determine the reliability of the measures used. When measures are reliable, random error of measurement is slight (Nunnally, 1967). The measurement can be repeated and the results will be similar. Therefore, the results obtained with these measures can be considered as evidence of the particular relationship being observed.

Internal consistency coefficients (alpha) were obtained in this analysis. As shown in Table 6, the magnitude of these coefficients is very small. They can all be assumed to be zero or near zero, including the ones that are negative (Factors II and III). The evidence indicates that these three I-E subscales (Factors I, II, and III) are not reliable measures, given that the evidence shows low internal consistency for all of them.
Table 6
Reliability Coefficients for the I-E Factors

<table>
<thead>
<tr>
<th></th>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALPHA</td>
<td>.07</td>
<td>-.33</td>
<td>-.18</td>
</tr>
<tr>
<td>No. of Items</td>
<td>13</td>
<td>5</td>
<td>11</td>
</tr>
</tbody>
</table>

As a way of examining the structure of Factor III (Feminism), it was submitted to a principal-component analysis, and the resulting factor matrix is reported in Table 7. The first subfactor

Table 7
Principal-Component Analysis Factor Matrix for I-E Factor III

<table>
<thead>
<tr>
<th>Itemsa</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>-.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>.54</td>
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<td></td>
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<td>40</td>
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<tr>
<td>33</td>
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<td>.62</td>
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<td></td>
<td>.56</td>
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<td></td>
<td>.54</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>.63</td>
</tr>
</tbody>
</table>

aItems included in the I-E scale, shown in Appendix D.
(Factor 1) is a political (group)-versus-individual-action factor, whereas the second subfactor (Factor 2) is a discrimination (structural)-versus-individual-blame factor. These two factors are the two components intended for this subscale.

The result of the factor analysis shows that, as it was intended for Factor III, the items of this subscale measure two major aspects of locus of control, a political-versus-individual-action factor, and a discrimination-versus-individual-blame factor. However, Factor III cannot be relied upon because the alpha coefficient for this subscale was very low.

The hypotheses in part A and the results relating to them are presented collectively here.

4. A.1. There will be an inverse relationship between sex-role egalitarianism and locus of control as a unidimensional variable. High egalitarianism will be associated with an internal locus of control and low egalitarianism with an external locus of control. In operational terms, SRES will correlate negatively with the unidimensional I-E scale in its original and modified forms.

4. A.2. There will be an inverse relationship between sex-role egalitarianism and the Protestant Ethic (cultural views) dimension of locus of control. High egalitarianism will be associated with internality on this dimension, and low egalitarianism with externality on the same dimension. In operational terms, the correlation between SRES and Factor I (Protestant Ethic) will be negative.

4. A.3. There will be an inverse relationship between sex-role egalitarianism and the personal control dimension of locus of
control. High egalitarianism will be associated with an internal personal control dimension, and low egalitarianism with an external personal control. In operational terms, the correlation between SRES and Factor II (Personal Control) will be negative.

4.A.4. There will be inverse relationship between sex-role egalitarianism and the feminism dimension of locus of control. High egalitarianism will be associated with internality on this dimension, and low egalitarianism with externality on the same dimension. In operational terms, the correlation between SRES and Factor III (Feminism) will be negative.

Table 3 shows the results pertaining to the four hypotheses grouped together as part A of the fourth hypothesis. These results show the relationship between the SRES and the locus of control.

<table>
<thead>
<tr>
<th></th>
<th>SRES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Combined</td>
</tr>
<tr>
<td>I-E Original</td>
<td>-.15**</td>
</tr>
<tr>
<td>I-E Modified</td>
<td>-.15**</td>
</tr>
<tr>
<td>I-E Factor I</td>
<td>-.05</td>
</tr>
<tr>
<td>I-E Factor II</td>
<td>-.17*</td>
</tr>
<tr>
<td>I-E Factor III</td>
<td>.16***</td>
</tr>
</tbody>
</table>

*p < .005  **p < .01  ***p < .05 one-tailed
measures. As shown in Table 8, in all three groups approximately half of the correlation coefficients were significantly different from zero. The magnitude of all of them was very small.

The correlation between SRES and the original scale was significant in two groups, combined and females, but not in the group of males (Table 8). The correlation with the modified scale was significant in the combined group and in the group of males (Table 8). All the significant correlations with the two unidimensional I-E measures were negative. These results suggest that in the current sample egalitarianism (high SRES scores) was associated with general internality (low I-E scores), and non-egalitarianism (low SRES scores) with general externality (high I-E scores). This finding is consistent with the hypothesis 4.A.1. that egalitarianism is associated with an internal generalized locus of control expectancy. Thus, the evidence shows a tendency for subjects in the present sample to be internal, that is, to believe they are in control of their behavior outcomes, when they were also egalitarian toward sex role.

The correlation between SRES and the I-E Factor I was not significant in any of the three groups (Table 8). These results do not lend support to the hypothesis 4.A.2. that there would be an inverse relationship between sex-role egalitarianism (SRES) and the Protestant Ethic dimension of locus of control (I-E Factor I). In the present sample, scoring internal of external on Factor I did not make a difference on whether subjects would be egalitarian or nonegalitarian.
The correlation between SRES and the I-E Factor II (Personal Control) was significant in all three groups (Table 8). The results provide support for the hypothesis (4.A.3.) that the correlation between SRES and Factor II would be negative. In the present sample there was a tendency for high SRES scores to be associated with low Factor II scores, and low SRES scores with high Factor II scores. As with all the I-E measures, high scores on Factor II represent externality, and low scores reflect internality. The coefficients obtained suggest that in the present sample egalitarianism was associated with internality on the Personal Control Factor. However, the magnitude of the coefficients was very small.

The correlation between SRES and the I-E Factor on feminism (III) was significant in the combined group and the subsample of females. These coefficients were positive (Table 8). These results do not lend support to hypothesis 4.A.4., which predicted a negative relationship between SRES and Factor III. The findings show that in the groups where the correlations in question were significant, egalitarianism tended to be associated with externality on Factor III, and non-egalitarianism with internality on the same factor. In other words, there was a tendency for egalitarians to have the view that sex inequality is caused by discrimination, not women's lack of training and evaluation; and that political action is better than individual action.

The hypotheses in this group and the related results are presented collectively as follows:
4.B.1. There will be no significant relationship between attitude toward feminism (ATFI) and locus of control (I-E) as a unidimensional variable (the original and the modified scales).

4.B.2. The relationship between attitude toward feminism (ATFI) and the Protestant Ethic dimension of locus of control (Factor I) will be inverse. A liberal attitude toward feminism will be associated with an external locus of control about Protestant Ethic, and a traditional attitude with an internal locus of control. That is, a liberal attitude will be associated with the rejection (implied in externality) of the Protestant ethic. In operational terms, the ATFI scale will correlate negatively with I-E Factor I (Protestant Ethic).

4.B.3. Attitude toward feminism (ATFI) will be positively related to the personal control dimension of locus of control (Factor II). A liberal attitude will be associated with internal personal control, and a traditional attitude with external locus of control. In operational terms, ATFI will correlate positively with Factor II (Personal Control).

4.B.4. Attitude toward feminism (ATFI) will be inversely related to the feminism dimension of locus of control (Factor III). Here, a liberal attitude will be associated with externality, and a traditional attitude with internality. In operational terms, ATFI will correlate negatively with Factor III (Feminism).

Table 9 presents the results pertaining to the four hypotheses grouped together as part B of the fourth hypothesis. The correlation between ATFI and the unidimensional I-E measures (original
and modified) was not significant for the females, males, or the combined group (Table 9). These results indicate that there was no significant relationship between ATFI and the unidimensional measures of locus of control in the current sample. This finding supports the hypothesis (4.B.1.) of no significant relationship between these variables. Apparently, as suggested by Sanger and Alker's (1972) findings, the unidimensional I-E scale cannot predict attitudes toward feminism.

The correlation between ATFI and Factor I (Protestant Ethic) was not significant in any of the three groups (Table 9). This finding does not give support to the hypothesis (4.B.2) of an inverse relationship between attitude toward feminism and Protestant Ethic. The zero or near-zero coefficients for the combined group

<table>
<thead>
<tr>
<th></th>
<th>Combined</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATFI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-E Original</td>
<td>.08</td>
<td>.06</td>
<td>.09</td>
</tr>
<tr>
<td>I-E Modified</td>
<td>.08</td>
<td>.05</td>
<td>.10</td>
</tr>
<tr>
<td>I-E Factor I</td>
<td>.00</td>
<td>-.06</td>
<td>.12</td>
</tr>
<tr>
<td>I-E Factor II</td>
<td>.04</td>
<td>.16***</td>
<td>-.21***</td>
</tr>
<tr>
<td>I-E Factor III</td>
<td>-.38*</td>
<td>-.42*</td>
<td>-.29**</td>
</tr>
</tbody>
</table>

*p < .001  ** p < .005  *** p < .05 one-tailed
and for females in particular suggest that there is no relationship between this sex-role attitude and this locus of control dimension. Therefore, these coefficients suggest that individuals can be internal or external on Factor I and still be feminist, that is, have a favorable attitude toward feminism.

The correlation between ATFI and Factor II (Personal control) in the combined group (Table 8) was not significant. The correlation was significant in the groups of females and males (Table 9). The positive coefficient for females suggests that in that group a liberal ATFI (low scores) was associated with internality (low scores) on Factor II. The coefficient also suggests that a traditional attitude toward feminism (high ATFI scores) was associated with externality (high scores) on Factor II. The relationship between the two variables in the group of males was negative. The result for males indicates that in that group favorable (liberal) ATFI was associated with externality on Factor II, and unfavorable ATFI with internality. Thus females who scored liberal on the ATFI tended to score internal on Factor II, that is, to believe that they were in control of their behavior outcomes; whereas males with similar ATFI scores tended to score external on the same subscale, or to attribute control of their behavior outcomes to external factors. Only the result for the group of females was consistent with the prediction (4.B.3) for the relationship between ATFI and Factor II. Therefore, this hypothesis received partial support.

All three correlations between ATFI and Factor III (Feminism) were significant (Table 9). The magnitude of the three coefficients
was greater than the other coefficients for the correlations between ATFI and the I-E measures. The correlations involving Factor III were all negative (Table 9). They support the hypothesis (4.3.4.) about the relationship between ATFI and Factor III. The results of this correlation analysis indicate that in the current sample a liberal ATFI was associated with externality on Factor III, and a traditional ATFI with internality on this Factor. Thus, subjects with a liberal ATFI in the present sample tended to view discrimination as the source of sex inequality, and political or group action as the best remedy against inequality.

Fifth Hypothesis

5. The results of the I-E original scale (the mean score) will be consistent with observations and findings that indicate that college students are becoming more external (Cellini & Kantorowski, 1982; Rotter, 1975).

Measures of centrality and variability on the original I-E scale for the current three samples are reported in Table 10. Also reported in Table 10 are normative data, one set from Rotter’s 1966 research and the other from Cellini and Kantorowski’s (1982) report. Subjects in these samples were undergraduate introductory psychology students. The current results are similar to Cellini and Kantorowski’s findings. There is a small mean difference between the current group of females and Cellini’s et al. female sample and between the two male samples. The largest mean difference (between the two samples of males) was not significant. The mean difference
Table 10

Means and Standard Deviations on the Original I-E Scale for the Current Sample, and the 1980 and the 1966 Samples

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>1980&lt;sup&gt;a&lt;/sup&gt;</th>
<th>1966&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Combined</td>
<td>Females</td>
<td>Males</td>
</tr>
<tr>
<td>Mean</td>
<td>11.35</td>
<td>11.30</td>
<td>11.43</td>
</tr>
<tr>
<td>St. Deviation</td>
<td>4.18</td>
<td>4.10</td>
<td>4.33</td>
</tr>
<tr>
<td>N</td>
<td>205</td>
<td>116</td>
<td>88</td>
</tr>
</tbody>
</table>

<sup>a</sup>Reported by Cellini and Kantorowksi, 1982
<sup>b</sup>Rotter, 1966

between females and males in the current sample is also small. This result is consistent with Cellini and Kantorowski's study, in which the mean difference between the female and male samples was smaller than the same difference in Rotter's 1966 sample. The current results differ somewhat from both sets of normative data in that the current female mean is smaller than the current male mean. In the current sample, males scored in a more external direction (higher scores) than females, although this difference is small and nonsignificant. This finding is consistent with studies (Mirels, 1970; Rotter, 1966) that found no significant mean differences between females and males. As indicated, when compared to Rotter's 1966 findings, Cellini and Kantorowski's findings showed that college students were becoming more external. There is no significant difference between the present results and Cellini and Kantorow-
ski's. The present results are similar to Cellini and Kantorowski's also in that there is only a small mean difference between females and males in the present sample. It appears that changes in the locus of control of college students have leveled off and stabilized. Locus of control, therefore, has changed, but presently it is no longer changing.

A contingency table analysis was performed in order to investigate the nature of the externality of the present sample. This analysis was exploratory and descriptive in nature, rather than inferential. The objective was to gather information for the development of hypotheses about the meaning of externality. Results of the contingency table (cross-tabulation) analysis are shown in Table 11. Items are grouped according to similarity of content.

Table 11
Percentage of Internal and External Responses on the Original I-E Scale Items

<table>
<thead>
<tr>
<th>Items</th>
<th>Internal</th>
<th></th>
<th></th>
<th></th>
<th>External</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>P</td>
<td>M</td>
<td>Td</td>
<td>X</td>
<td>P</td>
<td>M</td>
<td>Td</td>
</tr>
<tr>
<td>3</td>
<td>60.3</td>
<td>68.2</td>
<td>63.7</td>
<td></td>
<td>39.7</td>
<td>31.8</td>
<td>36.3</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>62.9</td>
<td>57.5</td>
<td>60.6</td>
<td></td>
<td>37.1</td>
<td>42.5</td>
<td>39.4</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>67.2</td>
<td>68.2</td>
<td>67.6</td>
<td></td>
<td>32.8</td>
<td>31.8</td>
<td>32.4</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>74.1</td>
<td>64.8</td>
<td>70.1</td>
<td></td>
<td>25.9</td>
<td>35.2</td>
<td>29.9</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>62.1</td>
<td>66.7</td>
<td>64.0</td>
<td></td>
<td>37.9</td>
<td>33.3</td>
<td>36.0</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>71.3</td>
<td>71.3</td>
<td>71.3</td>
<td></td>
<td>28.7</td>
<td>28.7</td>
<td>28.7</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Items&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Internal</th>
<th></th>
<th>External</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$p^b$</td>
<td>$m^c$</td>
<td>$T^d$</td>
<td>$p^b$</td>
<td>$m^c$</td>
<td>$T^d$</td>
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<tr>
<td>16</td>
<td>66.4</td>
<td>55.7</td>
<td>61.8</td>
<td>33.6</td>
<td>43.3</td>
<td>38.2</td>
</tr>
<tr>
<td>17</td>
<td>60.3</td>
<td>55.2</td>
<td>58.1</td>
<td>39.7</td>
<td>44.8</td>
<td>41.9</td>
</tr>
<tr>
<td>25</td>
<td>69.6</td>
<td>61.4</td>
<td>66.0</td>
<td>30.4</td>
<td>38.6</td>
<td>34.0</td>
</tr>
<tr>
<td>35</td>
<td>74.1</td>
<td>67.0</td>
<td>71.1</td>
<td>25.9</td>
<td>33.0</td>
<td>28.9</td>
</tr>
<tr>
<td>8</td>
<td>45.7</td>
<td>36.4</td>
<td>41.7</td>
<td>54.3</td>
<td>63.6</td>
<td>58.3</td>
</tr>
<tr>
<td>28</td>
<td>26.7</td>
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<td>73.3</td>
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<td>71.4</td>
</tr>
<tr>
<td>32</td>
<td>24.1</td>
<td>48.9</td>
<td>34.8</td>
<td>75.9</td>
<td>51.1</td>
<td>65.2</td>
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<tr>
<td>38</td>
<td>50.0</td>
<td>44.2</td>
<td>47.5</td>
<td>50.0</td>
<td>55.8</td>
<td>52.5</td>
</tr>
<tr>
<td>5</td>
<td>32.2</td>
<td>35.6</td>
<td>33.7</td>
<td>67.8</td>
<td>64.4</td>
<td>66.3</td>
</tr>
<tr>
<td>18</td>
<td>56.0</td>
<td>40.9</td>
<td>49.5</td>
<td>44.0</td>
<td>59.1</td>
<td>50.5</td>
</tr>
<tr>
<td>26</td>
<td>42.2</td>
<td>42.0</td>
<td>42.2</td>
<td>57.8</td>
<td>58.0</td>
<td>57.8</td>
</tr>
<tr>
<td>34</td>
<td>41.4</td>
<td>40.9</td>
<td>41.2</td>
<td>58.6</td>
<td>59.1</td>
<td>58.8</td>
</tr>
<tr>
<td>44</td>
<td>54.3</td>
<td>50.0</td>
<td>52.5</td>
<td>45.7</td>
<td>50.0</td>
<td>47.5</td>
</tr>
<tr>
<td>6</td>
<td>37.9</td>
<td>32.2</td>
<td>35.5</td>
<td>62.1</td>
<td>67.8</td>
<td>64.5</td>
</tr>
<tr>
<td>12</td>
<td>19.0</td>
<td>30.7</td>
<td>24.0</td>
<td>81.0</td>
<td>69.3</td>
<td>76.0</td>
</tr>
<tr>
<td>31</td>
<td>24.1</td>
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<td>34.8</td>
<td>75.9</td>
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<td>65.2</td>
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<tr>
<td>39</td>
<td>38.8</td>
<td>44.8</td>
<td>41.4</td>
<td>61.2</td>
<td>55.2</td>
<td>58.6</td>
</tr>
</tbody>
</table>

<sup>a</sup>Items are presented in Appendix F (I-E Scale)
<sup>b</sup>Females: 116 Ss
<sup>c</sup>Males: 88 Ss
<sup>d</sup>Total: 204 Ss
The proportion of subjects responding in an internal direction was higher for items concerning luck (items 3, 15, 21, 23, 43), and those concerning success (in the job or at school) and leadership (items 11, 16, 17, 25, 35).

On the items having to do with effort (or ability) versus accidental happening or chance (items 8, 28, 32), there was a tendency for subjects to select the external alternative. Item 15 could also be considered to be a "chance" item. The association of externality with items about chance is not supported by the majority of responses on this item (15). The majority (60.6%) selected the internal alternative (Table 9). Item 15 may not be a "chance" item in the same way items 8, 28, and 32 are. Item 15 also addresses the opposition of fate (luck) to effort ("decision to take a definite course of action"). The greater percentage of internal choices (emphasizing effort) seems to be consistent with the way subjects responded on "luck" items. Item 15 seems to have been perceived as a "luck-versus-effort" (rather than chance) item by the present sample.

Another possible contradiction involves item 38. This item concerns luck versus personal effort. Results indicate that the majority of subjects selected the internal alternative on luck items. However, 52.5% picked the external option on item 38. This result may be accounted for by the combination of luck and chance in the internal statement of item 38. Subjects may have perceived this item as a chance item. Although chance and luck may not usually be distinguished as separate ideas (i.e., luck is usually seen as an
element of chance), the majority of respondents in the present study may have perceived them as distinct concepts. On item 38 they may have rejected the internal choice because it expresses the belief that chance (along with luck) plays no part in one's life. The pattern or responses of the present sample emphasizes externality on items concerning chance.

The results show a similar pattern of responses for females and males, although there is a slightly greater tendency for females to be more internal on the items concerning success, and for males to express internality on items involving luck (Table 11). In a similar fashion, results do not show a large sex difference for the nature of externality. In general, there was a higher overall percentage of external responses on most items concerning politics (items 5, 18, 26, 34), and on the ones involving interpersonal matters (items 12, 31, 39), including the one on respect and recognition (item 6). Females were more likely than males to respond toward the external direction on interpersonal items, except on item 6 (respect and recognition). The results show greater externality on the part of males to be associated with items concerning politics, except the one about wars (item 5). Another item about politics (item 44) received a higher percentage of internal responses from females and 50% of internal responses from males.

The general pattern of I-E responses can be summarized as follows:

1. The majority of responses indicated the belief that the
events in one's life may be affected by accidents (a belief that shows an external orientation), but not determined solely by luck or fate (a belief that shows an internal orientation). These responses were indicative of a belief in the relationship between effort and success. This particular association is considered to be reflective of self-efficacy and self-reliance in mainstream groups. The results showed that subjects believed that those who do not do well have failed because they have wasted their opportunities.

2. The pattern of responses suggested a sense of powerlessness or lack of control, when it comes to dealing with other people, whether one considers friendships or getting recognition. The externality associated with the interpersonal arena is possibly related to developmental factors. Regardless of age, college students tend to be concerned with friendship as well as respect (acceptance and recognition) issues. Possibly, the sense of powerlessness in this arena reflects a level of anxiety about completing interpersonal tasks adequately.

3. Subjects were also more likely to endorse the view that when it comes to politics, the control is in the hands of powerful others (item 18). They were likely to see themselves as being powerless with regard to corruption among politicians, as well as world events and major political processes (wars).

Measures of centrality and variability on the modified I-E scales and the I-E subscales (factors) are given in Table 12. This I-E scale and the subscales were used for the purpose of enhancing the chance of observing the relationship between locus of control
and sex-role attitudes. Therefore these measures are discussed in the context of the correlation analysis involving this relationship.

The relationship among the I-E measures used is shown in Tables 13 (combined), 14 (females), and 15 (males). For all three groups, the relationship between the original and modified scales was positive, high, and significant. The correlation between the original I-E Scale, as well as the one between the modified scale,

<table>
<thead>
<tr>
<th>Table 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means and Standard Deviations on the Modified I-E Scale and the I-E Factors I, II, and III for the Three Research Groups</td>
</tr>
<tr>
<td>Combined (205)</td>
</tr>
<tr>
<td>St.</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>I-E Modified</td>
</tr>
<tr>
<td>I-E Factor I</td>
</tr>
<tr>
<td>I-E Factor II</td>
</tr>
<tr>
<td>I-E Factor III</td>
</tr>
</tbody>
</table>

and the first two factors, was also significant and positive for all three groups. For all three groups, the coefficients indicating a positive relationship between the first two factors were significant. However, the magnitude of the latter was smaller than that of those coefficients involving these factors and the unidimensional scale in either form. The correlation between Factor III and the
Table 13
Matrix of Intercorrelations of the I-E Measures for the Combined Group (205 Subjects)

<table>
<thead>
<tr>
<th>I-E Measure</th>
<th>Modified Scale</th>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Scale</td>
<td>.96*</td>
<td>.75*</td>
<td>.72*</td>
<td>.11</td>
</tr>
<tr>
<td>Modified Scale</td>
<td>.85*</td>
<td>.68*</td>
<td>.12**</td>
<td></td>
</tr>
<tr>
<td>Factor I</td>
<td></td>
<td>.38*</td>
<td>.23*</td>
<td></td>
</tr>
<tr>
<td>Factor II</td>
<td></td>
<td></td>
<td>-.00</td>
<td></td>
</tr>
</tbody>
</table>

* \( p < .001 \)  **\( p < .05 \) one-tailed

Table 14
Matrix of Intercorrelations of the I-E Measures for Females (116 Subjects)

<table>
<thead>
<tr>
<th>I-E Measure</th>
<th>Modified Scale</th>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Scale</td>
<td>.97*</td>
<td>.73*</td>
<td>.78*</td>
<td>.05</td>
</tr>
<tr>
<td>Modified Scale</td>
<td>.83*</td>
<td>.74*</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Factor I</td>
<td></td>
<td>.43*</td>
<td>.16**</td>
<td></td>
</tr>
<tr>
<td>Factor II</td>
<td></td>
<td></td>
<td>-.09</td>
<td></td>
</tr>
</tbody>
</table>

\( p < .001 \)  **\( p < .05 \) one-tailed
Table 15

Matrix of Intercorrelations of the I-E Measures for Males (38 Subjects)

<table>
<thead>
<tr>
<th>I-E Measure</th>
<th>Modified Scale</th>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Scale</td>
<td>.96*</td>
<td>.79*</td>
<td>.65*</td>
<td>.20***</td>
</tr>
<tr>
<td>Modified Scale</td>
<td>.88*</td>
<td>.60*</td>
<td>.21***</td>
<td></td>
</tr>
<tr>
<td>Factor I</td>
<td></td>
<td>.34*</td>
<td>.31**</td>
<td></td>
</tr>
<tr>
<td>Factor II</td>
<td></td>
<td></td>
<td>.17</td>
<td></td>
</tr>
</tbody>
</table>

*p < .001  **p < .005  ***p < .05  one-tailed

other measures was significant in some cases and nonsignificant in others. These correlations involving Factor III were the lowest.

Summary of the Present Results

The present research results showed a significant, direct relationship between sex-role egalitarianism (SRES) and attitude toward feminism (ATFI). Thus, when subjects were egalitarian, they were also feminist. In a similar fashion, when they scored traditional on the SRES, they also scored traditional on the ATFI. Apparently, the more egalitarian individuals are, the more feminist they are as well. The present SRES mean for the combined group was either above or close to the scores used as general reference points. There was no evidence of an increase in sex-role egalitarianism. The present sample seemed to be average in egal-
tarianism, neither traditional nor nontraditional. The current ATFI mean for the combined group was significantly lower than the mean for the 1975 group of undergraduates from an introductory psychology class. Therefore, the present sample was more liberal toward feminism than the 1975 sample. On the basis of this finding, it appears that college students have become more feminist (more liberal toward feminist issues). The mean difference on both sex-role attitude measures (SRES and ATFI) between females and males was significant. Therefore, in the present sample females were more egalitarian and more feminist than males. This finding is consistent with reports that indicate that females are more liberal toward sex role than males (Beere et al., 1984).

The reliability coefficients for the I–E factors (sub scales) used were very low. The correlations between these factors and the sex-role attitude scales (SRES and ATFI), and between the unidimensional I–E scales and the attitude scales, were generally very low, although some of them were significant. None of the correlations between the sex-role attitude scales and Factor I (Protestant Ethic) was significant. All but one of the significant correlations between SRES and the I–E measures indicated that sex-role egalitarianism in the present sample tended to be associated with an internal locus of control. The exception was the correlation between SRES and Factor III (Feminism), which was significant, but not negative as predicted. In contrast with the other correlation between SRES and I–E, the one between SRES and Factor III indicated that high sex-role egalitarianism was associated with externality on
this factor.

As predicted, the correlations between ATFI and the unidimensional I-E scales were not significant. The significant correlations between ATFI and the I-E factors showed an association between a liberal ATFI and internality on Factor II (Personal Control) for females, and externality on this factor for males. The correlation results also showed an association between a liberal ATFI and externality on Factor III.

The present I-E results were similar to Cellini and Kantorowski's 1980 findings. Hence, even though the locus of control of college students changed during the period between the late 1960s and 1980, the trend towards externality seems to have leveled off. There was not a significant difference between females and males. The current results also showed that the greater proportion of external responses were on the I-E items having to do with accidental happenings, that is, chance (but not luck), on most items about politics, and the ones concerning interpersonal matters.
CHAPTER V

DISCUSSION OF THE RESULTS, CONCLUSIONS, LIMITATIONS, RECOMMENDATIONS, AND IMPLICATIONS FOR COUNSELING PSYCHOLOGY

Discussion of the Results

The results will be discussed in reference to the hypotheses.

First Hypothesis, Part A

The SRES results suggested that the present sample was average in sex-role egalitarianism, that is, it was neither traditional nor nontraditional. Subjects in the present sample were at least minimally receptive to sex-role changes. This receptiveness may be attributed to the social changes of the late 1960s and early 1970s. Chafe (1977) indicated that during the period between 1970 and 1975 attitudes changed in response to the Women's Liberation Movement. On the other hand, not being definitely nontraditional or egalitarian toward sex-role, the present subjects in the present sample did not seem to hold attitudes that were clearly in favor of nontraditional roles for women and men. On the basis of the findings, it may be said that sex-role attitudes have not continued to change in the 1980s. The change in sex roles occurred during a period of dramatic social events, such as the beginning of the women's movement and the increase in women's participation in the workforce, but the transition caused by these movements is no longer
in effect, at least not at an accelerated rate. The present time may be one of accommodation to these changes. The results of the study may reflect a conservative social climate at present.

Moreover, although reports indicated that individuals had become more liberal toward sex role (Phares, 1984), this liberalism may not be as dramatic with regard to sex-role egalitarianism, at least as defined in the present research. Egalitarianism is an individualistic dimension, involving personal and interpersonal factors or processes. As such, this dimension concerns an area of psychological functioning that is more immediately related to personal identity. It is possible that for subjects in this research the sex-role changes addressed in the Sex-Role Egalitarianism Scale (SRES) appeared to entail greater psychological investment than the changes addressed in the Attitude Toward Feminist Issues Scale (ATFI). These subjects may have found it easier to agree with the changes included in the feminist dimension that were structural, and that did not seem to involve personal relationships immediately. Thus, these changes could have been viewed as abstract rights, which are important, but have no immediate bearing on who one is, or on how one conducts one's personal relationships. It may be easier, for example, to accept the notion of equal pay for equal work than to accept the specificities of equal sharing of domestic chores and childcare. The nature of the changes in the latter case entails a change in how one sees oneself (i.e., a change in one's identity). Women and men have traditionally been socialized to expect that the housekeepers and the
primary caretakers of children will be female, and the primary wage-earners will be male. Furthermore, as indicated by Block (1973), the acquisition of these roles results in a sense of self, and not simply in the acquisition of femininity and masculinity. These roles largely determine one's dealings with the social world. That is, women and men behave and respond to others in accordance with their sex roles. In light of the importance of sex roles for identity, it is not surprising that the acceptance of sex-role changes had not been more definite. For both women and men, the sense of self is largely rooted in their sense of being the sex that they are. It is therefore probable that changes in something as fundamental as sex role will be resisted.

On the other hand, the following question concerning the present results arises: Should the present subjects, who were young and single, not be expected to be less resistant to changes? It may be speculated that if the present social climate is indeed widely conservative, even young people should be affected, especially since they, unlike their parents, have not been exposed to the changes of the late 1960s. In the relatively quieter social climate of today, young people may not be as compelled to criticize or question traditional sex roles. Their major concerns might be different. In quieter times individuals appear to be more concerned with establishing themselves in a career, rather than questioning the social norms.

Furthermore, despite the social changes of the last two decades, it does not seem that the young people of today were
socialized in a decidedly nontraditional fashion. Their parents may not have changed enough to have raised their children in a way that was radically different from that of previous generations. The social events of recent history were not related to sex roles exclusively. Additionally, although the greater involvement of fathers in childcare is now considered more frequently, women have continued to be the primary caretaker. This situation illustrates the point that, although liberalization has occurred, sex roles have also remained traditional. Therefore, young people may also have a sense of self rooted in traditional sex roles. The sexual identity of college students is also derived from the notions about what a woman or a man is, or should do, that one learns in one's culture. Hence, if changes have occurred and the present climate reflects these changes, but is, at the same time, more conservative, it is expected that young people will also be neither traditional nor nontraditional.

First Hypothesis, Part B

As conceptualized and measured in the present research, attitude toward feminism (ATF) is a collective dimension, involving concerns with the social structure. The current evidence of an increase in ATF liberalism suggests that college students may be becoming more receptive to sex-role changes at the institutional level. Again, the results may reflect the influence of social changes on sex-role attitudes. Women's greater participation in the job market and related changes may have contributed to the changes
in the expectations for women. Possibly, it has become more likely for attitudes to be favorable toward nontraditional roles when the latter concerns the public sphere, as opposed to the home. Ettaugh and Spandikow (1981) reported that college students' attitudes were more liberal towards women's educational and vocational rights than toward women's marital and maternal roles. Rights are addressed in the Attitude Toward Feminist Issues Scale. Perhaps, the obtained evidence of an increase in liberalism reflects the continued concern with equal rights and a general opposition to discrimination, even if individuals are not activists as often as they tended to be 15 or 20 years ago.

**Second Hypothesis**

The present results showed that, as measured, egalitarianism and feminism were directly related. The results revealed that the two attitudinal dimensions are coherent. Both seem to measure attitudes toward sex role. The results also showed that this coherence was greater for females than for males. In the group of males, scoring high or low on one dimension was less likely to be associated with a similar ranking on the other dimension. This finding is in support of reports that males are not consistent in their attitudes towards nontraditional sex roles. According to other research, the acceptance on the part of males of sex-role changes involves general principles, rather than specific aspects, of sex equality (Thornton & Freedman, 1979). Even when males endorse the participation of women in the labor force, they may
resist changes in their own role (Komarovski, 1973; Macionis, 1989). Furthermore, men were found to resist changes in sex roles concerning the home (Farrell, 1975). Thus, even though there seems to be a direct relationship between sex-role egalitarianism and attitude toward feminism among females and males, there is less coherence among males. Males are apparently more likely to accept only certain aspects, not the whole spectrum of sex equality.

Third Hypothesis

In the present sample, females were more liberal than males on both the SRES (egalitarianism) and the ATFI (feminism). This result is consistent with reports that women are more likely to be liberal toward sex roles (Beere et al., 1984; Spence & Helmrich, 1972). Women's greater liberalism can be accounted for by Bem's (1970) self-perception theory. According to this theory, individuals infer their attitudes, at least partially, from their observation of their behavior and the circumstances of that behavior. Attitudes are more likely to be based on self-observation when one's motives are not clear. Perhaps, this lack of motivational clarity occurs in women's experience.

Gilligan's (1982) study of women's moral development demonstrated that women's identity tends to be based on attachment and interpersonal relationships. On the other hand, this identity appears to be ultimately related to their position in society. Women have a subordinate social position (Beere et al., 1984) and, as a result, they have not had as much access to the various areas
in society besides the home. Hence, they have traditionally identified with family or affective activities. Because of this involvement, they have been committed to traditional roles, especially their maternal roles. This commitment may be particularly strong in the absence of a clear consciousness of their subordinate status in society. On the other hand, women have been obligated by the changes in the economy in this country to enter the job market (Sapiro, 1986), and therefore, to engage in activities that had previously been assigned mostly to men. Socioeconomic changes have led to the diversification of women's roles. In the absence of a definite awareness of their social position, women may not perceive their motives clearly, and they find themselves in a paradoxical situation: their identity is grounded in personal attachment and relationships, not in the achievement-oriented workplace, and yet a great part of their time is now spent in the workplace, outside the home and the realm of personal or affective relationships. Their income may be a motivational force behind their decisions to work, but cannot be taken as the explanation for the development of liberal sex-role attitudes. A woman could work because she needed to, and still believe that "a woman's place is in the home." Therefore, it seems plausible to explain the liberalism of women in terms of Bem's self-perception theory. That is, women may infer their attitudes from the observation of their behavior. They see themselves working outside the home and engaging in other nontraditional activities, and they infer from this observation that nontraditional roles are appropriate for women. Because they are
preparing for a career, female college students may identify with women working for wages, and therefore have similar attitudes. Women may also hold favorable attitudes towards men in nontraditional roles, because changes in the roles of women entail changes in the roles of men, and vice-versa.

The situation of men differs in that men remain involved with work outside the home, an activity that is traditional for them. Their work activities reinforce traditional notions about "what men do." The feedback from the observation of their behavior is less conducive to the formation of liberal attitudes. In accordance with Bem's behavioristic or cognitive-behavioral theory of self-perception, for men to become more receptive to sex-role changes, it is necessary that they engage in activities that are nontraditional for men. These activities are typically home-related, and generally not immediately regulated by general social trends. In this respect, men are freer than women from external pressure to change. If, as Bem claimed, internal cues are weaker than external factors, men may be less compelled to change or to develop nontraditional views about sex roles. Furthermore, sex-role changes imply changes in status and in identity. Given that men do not have a subordinate status, they may be more invested in keeping their status and their identity. They may be more satisfied with traditional roles because they view these roles as being tied to a privileged position, with better opportunities in society. As a result, they may be more resistant to change. It is possible that this situation is largely the same for older and younger men.
In sum, the greater liberalism of women suggests that sex is a predictor of sex-role attitudes. The sex of an individual seems to be a definite indication of whether or not that individual will be liberal toward sex role. In addition, women's sex-role attitudes are also more likely to be more coherent, that is, women are more likely to be consistently liberal, or consistently conservative.

Fourth Hypothesis, Parts A and B

The correlations between egalitarianism (SRES) and feminism (ATFI) and locus of control (I-E) were very low. Some of the significant correlations were consistent with the predictions. However, because they were consistently low, they did not confirm that locus of control is associated with sex-role attitudes. On the basis of these results, it can be said that locus of control is not a predictor of sex-role attitudes.

The observation of the relationship between sex-role attitudes and locus of control may have been hampered by the employment of measures which, as the analysis showed, turned out to be unreliable. However, the low reliability coefficients were obtained for the I-E subscales. The reliability of the unidimensional measure was already known at the beginning of this study, and it is higher. The correlations involving the unidimensional measure (the original and modified versions) were nevertheless equally low. Hence, it may simply be that locus of control is not a predictor of sex-role attitudes.

Perhaps, locus of control is not a predictor because it is a
more basic personality dimension, which is independent of sex. As such, locus of control probably concerns a range of processes that are common in the experience of women and men. Research findings indicate that there are not significant differences in locus of control between women and men (Mirels, 1970; Rotter, 1966). The present I-E results were consistent with previous findings showing no significant sex difference. On the other hand, previous and present findings indicate that sex is a predictor of sex-role attitudes. Sex-role attitudes are more immediately perceived as being related to sex. Probably because women and men see their respective social positions differently, being liberal or conservative regarding sex roles is largely contingent upon sex. Being internal or external in locus of control is not as dependent upon the sex of the individual. In light of the existence of a connection between sex-role attitude and sex, and the absence of an association between locus of control and sex, it may be said that sex is possibly an intervening variable. Apparently, it operates in the capacity of a mediator, contributing to the possibility of a relationship between sex-role attitudes and another variable. Thus, it may be that, if a variable varies on the basis of sex, possibly it is also associated with sex-role attitude, since the latter seems to vary largely on the basis of sex.

Fifth Hypothesis

Cellini and Kantorowski (1982) indicated that the locus of control of college students was becoming more external. They
suggested that the trend toward externality was a reflection of social influences. The present locus of control (I-E) results suggest that this trend has leveled off. Apparently, both locus of control and sex-role attitudes changed because individuals became more attuned to external influences of behavior. As regards locus of control, the change seems to have been a reflection of an awareness of sociopolitical determinants of behavior. In today's society these factors may not have the same prominence, especially because legislative reform has occurred. Individuals may feel that things have changed substantially. The primary concern is, instead, with the acquisition of skills necessary for adequate adjustment. Therefore, although college students may now be on the average more external than their counterparts in the 1960s, the trend is not towards greater externality.

It is possible, as suggested, that the stabilization of the trend toward externality can be accounted for by the focus of college students on concrete adjustment issues, such as job and career. This focus contributes to a shift back to a concern with internal factors, such as effort and the development of a skill. This concern seems to moderate or attenuate the externality. The analysis of the pattern of the present I-E responses revealed that the majority of subjects endorsed I-E items showing the connection between effort and success. Thus, although they were external in some aspects, they were internal with respect to work and study.

The present findings were also consistent with reports that individuals of an external orientation do not form a homogeneous
group (Gurin et al., 1966; Hersche & Scheibe, 1967). Apparently, individuals can be external about one aspect of locus of control, and internal about another aspect. The majority of subjects in the present sample were external about politics, especially international politics, and internal about personal matters involving work and school. Thus, as indicated by previous reports, externality may be associated with factors other than personality dysfunction. One can be external about certain matters and still have a sense of self-efficacy, that is, a sense of control over personal matters and behaviors. Their externality associated with the interpersonal arena is possibly related to developmental factors. Regardless of age, college students tend to be concerned with friendships as well as respect (acceptance and recognition issues). Possibly, the sense of powerlessness in this area reflects a level of anxiety about completing interpersonal tasks adequately.

Conclusions

The present findings appear consistent with the observation that social factors influence individual psychology. Social factors seem to affect cognitive dimensions, such as locus of control and the sex-role attitudes examined, sex-role egalitarianism (SRES) and attitude toward feminism (ATFI). These dimensions have apparently changed as a result of the major social events of the late 1960s and early 1970s, but at present this change seems to have stabilized. The concern with the sex equality of rights may still be growing, as the present ATFI evidence indicates, but in the interpersonal
context (SRES) college students are neither nontraditional nor traditional. The concern with rights may be related to the observation of changes in the job market, due to the increase in women's participation. Possibly, there is an awareness of a need to restructure the public sphere in order to accommodate the new workers. However, as indicated by the locus of control results, college students remain otherwise traditional about work. They seem to hold traditional internal beliefs about the connection between effort and success with respect to work and school. They appear to have this internal orientation even when they have external beliefs concerning politics and interpersonal issues. Thus, college students may be open to changes to ensure equality in the workplace and other areas, and still believe that effort, that is, internal, not external, factors determine whether one is or is not successful.

Females are more receptive to sex-role changes and more consistent in their endorsement of these changes. Their liberalism and greater coherence can be accounted for by their actual experience of change. Women's roles have changed a great deal as a result of the increase in their participation in the job market. On the other hand, the situation with males seems to reflect anxiety and ambivalence. Perhaps, they fear that sex-role changes will result in a change in their status and their identity. The same apprehension may not be as common among women, first of all because they have already experienced change. Females may also be less anxious about changes because they want to change their subordinate social position. Men may be more invested in keeping their position,
especially because they have not seen changes in men's roles of the same magnitude that women have seen in women's roles.

Change in locus of control seems to have occurred as a result of social factors, in the same way that change in sex-role attitude did. However, there does not seem to exist a great deal of coherence between the two cognitive dimensions. In the present research, locus of control was not a predictor of sex-role attitudes, apparently because the latter is related to sex, and locus of control is not. Locus of control may be a basic personality dimension, which develops on the basis of processes common to the experience of both sexes. The variability of locus of control may depend on sex-neutral processes. On the other hand, sex is an important factor for sex-role attitudes. Women tend to be more liberal and more consistent in their sex roles. It is possible that they are more dissatisfied with their position in society and with the roles associated with this position. It is, therefore, to be expected that sex will be a major predictor, as well as a mediating variable in the relationship between sex-role attitudes and a third variable.

Limitations of the Present Research

The sample for the present research was taken from a college population. As a result, generalizing across populations may be restricted. Methodologists have pointed out that although the direction of the attitudes of a given group may not be generalizeable to other populations, the formation and the change of these
attitudes may be under the same laws for all populations. Nevertheless, the present results apply more appropriately to the college population.

Furthermore, subjects for this study were selected from three universities that differ to some degree in the composition of the student body regarding age and other demographic indexes. The student population in one school is made up of "traditional" (young) students, while the other two have a large percentage of "nontraditional" (older) students. It was expected that this combination would not only favor the achievement of greater variability, but also increase generality of results. On the other hand, the question may be raised about whether a group of "nontraditional" students would cause the sex-role results to be less liberal. However, the demographic information about the sample indicates that the majority of subjects were young. In any case, the inclusion of nontraditional students may affect the generalizability for college-student populations that do not include this type of student.

The present study does not address the relationship between attitude (cognition) and behavior. The concern here is with the clarification of additional cognitive aspects of the traits being studied, the cognitive coherence of these traits, rather than the relationship with behavior. However, the absence of a behavioral component may have hindered the observation of the relationships under investigation.

There are two other limitations of the present study. First of
all, the interpretation of the SRES results could have been enhanced by a comparison between these results and previous SRES data from a comparable group. The comparison with the criteria used in the evaluation of the SRES results suggests that the sample was average in egalitarianism. It does not show whether college students are becoming more or less egalitarian.

Second, the obtained alpha coefficients indicated that the I-E (locus of control) subscales employed are not reliable measures. These coefficients are low when the measure in question is too short, or when the scale or subscale items have very little in common (Nunnally, 1967). Given that on a rational basis (content analysis and face validity) the items in each subscale used appear to be related, the number of items in each subscale may be a more likely source of measurement error here. The number of items in the three I-E subscales is as follows: Factor I (Protestant Ethic) has 13 items; Factor II has five items, and Factor III has 11 items. Furthermore, subjectivity in scoring may be ruled out because the subscales are scored objectively.

Recommendations for Further Research

The current results and the limitations of the present research suggest several questions for future research. With respect to the assessment of increased liberalism, it is recommended that normative data on the Sex-Role Egalitarianism Scale (SRES) be obtained, and clear comparability guidelines be identified. It is also recommended that the Attitude Toward Feminist Issues Scale (ATFI) be
administered to larger samples. In this way the basis for the assessment of ATFI liberalism may be improved.

Concerning the relationship between sex-role egalitarianism (as measured by the SRES) and attitude toward feminism (as measured by the ATFI), further investigation is recommended in order to obtain estimates of the discriminant and convergent validities of the two scales (the SRES and the ATFI) used to measure these traits. King and King (1986) reported evidence of the discriminant validity of the SRES, one of the scales used in the present research. However, in their research the discrimination between sex-role egalitarianism and feminism (attitude toward feminism) involved the use of the Attitude Toward Women Scale (ATW) as the measure of feminism. In addition, according to King and King's research and the present results of the sex-role attitude coherence, there seems to be a convergence between the two traits as measured. It appears that further clarification of these constructs is needed. The question of whether egalitarianism and feminism are the same attitudinal dimension needs to be examined further. Replication of validation efforts employing the ATFI instead of the ATW is therefore recommended.

Previous and present research findings suggest that nontraditional (liberal) views and attitudes about sex role are more frequently associated with females than with males. It is recommended that further research be undertaken in order to identify possible sources of influence on the extent and frequency of liberal sex-role views among males.
Regarding the relationship between sex-role attitudes and locus of control (I-E), it is recommended first of all that reliable I-E measures be developed. In addition, further investigation is recommended to examine the interaction of sex and locus of control in the prediction of sex-role attitudes.

Finally, it is recommended that the relationship between externality (of locus of control) and nontraditional or liberal sex-role attitudes be investigated further.

Implications for Counseling Psychology

The present findings suggest a few important issues for therapists to explore. First of all, when clients express liberal views about sex-roles, it does not follow that these individuals are necessarily nonconventional or countercultural, or that they are after nonconventional changes in their lives. Their views may reflect a concern with concrete problems, such as adequate job conditions. This type of concern is possible, for instance, when the client is a woman, because presently women are likely to work outside the home. Given that the presence of women in the job market is a relatively new development, conditions in the workplace may not have changed sufficiently in order to accommodate this new population of workers. Therefore, work adjustment can be a major concern with women, and it can be expressed in their attitudes towards sex roles.

The present results appear to be relevant to the couples counseling situation, even though the present research involved
mostly young, single college students. The present results provide information that may be useful for the counseling of heterosexual couples. In the couples counseling situation, when women or men express nontraditional views about sex roles, they may or may not mean to say that they wish to change their roles in the home. Their meaning must be investigated, not simply assumed. Moreover, as a group, women tend to be more liberal, and more consistent in their liberal views. This sex difference is potentially a source of relationship problems for couples. Men may be resistant to changes, especially when changes involve personal activities, such as family activities. They may view these as a threat to their identity as a man. Males are probably more invested in their identity because they do not see their behaviors deviating significantly from traditional roles. When the individuals in the couples counseling situation decide that they want change anyway, the attitudes and feelings of the male partner needs to be fully investigated. Men's anxiety can probably be treated in the same way that other forms of anxiety are treated. Thus, men can, for example, enter a (perhaps modified) program of desensitization and, under the therapist's guidance, experiment with new behaviors gradually. In this way, they will have the opportunity to realize that change does not have to entail a threat to their identity as a person.

As regards locus of control, therapists need to bear in mind that an external orientation may include significant internal beliefs. Furthermore, as the present results suggest, externality does not necessarily imply a lack of self-efficacy, or the absence
of a sense of control over one's behavior and one's life. On the other hand, the results suggest that students may have a sense of powerlessness in the interpersonal sphere. This area of concern is a possible target area for intervention. The results reinforce the need to provide individual therapy, group counseling, and educational programs (workshops and lectures), geared to the improvement of interpersonal skills, as well as the enhancement of self-confidence in interpersonal situations. In the situation of individual therapy, counseling psychologists may be guided by the implication in the present results that when a client is external, she/he will not necessarily be maladjusted or impaired in the ability to study or work. The present findings suggest instead that individuals may nevertheless experience anxieties about interpersonal concerns. They may also be concerned about how to cope with the complexities of a fast-changing world, where major political processes are beyond the grasp of the average person.
Appendix A

Personal Data Blank
PERSONAL DATA BLANK

Use the attached answer sheet to answer the following (Make sure you enter letter A - for number 1, this form's number - in the column FORM, and your number from the General Instructions form in the boxes for Student ID no.

1. Year in school (if you are a non-degree student leave this item blank).
   A. Freshman
   B. Sophomore
   C. Junior
   D. Senior
   E. Graduate

2. Sex
   A. Female
   B. Male

3. Age
   A. up to 20
   B. 21-30
   C. 31-40
   D. 41-50
   E. 51 +

4. Marital Status
   A. Single  C. Divorced  E. Widowed
   B. Married  D. Separated

SOURCE: The Personal Data Blank was developed by the author of the present research
Appendix B

The Attitude Toward Feminist Issues Scale
PLEASE NOTE:

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

These consist of pages:

103–110
112–118
120–121
123–128
Appendix C

The Sex-Role Egalitarianism Scale
Appendix D

The Sex-Role Egalitarianism Scale (SRES), Scoring Key
Appendix F

Clearances From the Human Subjects Institutional Review Boards
TO: Virginia de Oliveira-Alves
FROM: Ellen Page-Robin, Chair
RE: Research Protocol
DATE: March 20, 1989

This letter will serve as confirmation that your research protocol, "The Distinction between Attitude Toward Feminism and Sex-Role Egalitarianism on the Basis of Internal-External Control," is now complete and has been approved as exempt by the HSIRB.

If you have any further questions, please contact me at 387-2647.

P.S. We have made copies of your other clearances so that you can retain the original copies.
March 2, 1989

Ms. Virginia de Oliveira-Alves
1215 East 35th Avenue, #2A
Griffith, IN 46319

Dear Ms. de Oliveira-Alves:

I have reviewed your proposal and had it approved by the Human Subjects Committee Chairperson and the Chairperson of the Sociology/Anthropology Department. Please feel free to have your questionnaires administered in sociology classes as so indicated in your proposal. I hope you are successful in your dissertation research.

Cordially,

Mark Reshkin
Assistant Vice Chancellor for Academic Affairs

MR/ims
pc: Dr. Johnston, Chairperson
Sociology/Anthropology Department
March 3, 1989

Virginia De Oliveira-Alves
1215 E. 35th Avenue, Apt. 2A
Griffith, IN 46319

Dear Ms. De Oliveira-Alves:

I have examined your research proposal, "The Distinction between Attitude Toward Feminism and Sex-Role Egalitarianism on the Basis of Internal-External Control," and I find that it clearly falls under the Purdue University Committee on the Use of Human Subjects in Research's category of being exempt from review.

Sincerely,

Dwight R. Kirkpatrick, Ph. D.
Chair
Purdue University Calumet Committee on the Use of Human Subjects in Research
Ms. Virginia de Oliveira-Alves
1215 East 35th Avenue #2A
Griffith, IN 46319

Dear Ms. de Oliveira-Alves:

The Valparaiso University Institutional Review Board (IRB) met on February 27, 1989, and reviewed your request to use students from psychology classes at Valparaiso University as subjects for your dissertation research. The title of your proposed research is "The Distinction between Attitude Toward Feminism and Sex-Role Egalitarianism on the Basis of Internal-External Control."

I am pleased to report that Valparaiso University's IRB approved your request, with the following qualifications, noting that your proposal has been approved as exempt by the Western Michigan HSIRB:

1. that a copy of the exemption from Western Michigan be filed with VU's IRB; and
2. that a copy of your results be sent to VU's IRB.

It is assumed by VU's IRB that you will work directly with faculty members in the Department of Psychology as you select your subjects.

Please contact my office if you have additional questions, or if I can be of assistance in the future.

Sincerely,

Nancy Sederberg, Ph.D.
Director

March 10, 1989
Appendix G

Oral Instructions
I will be passing out a set of three tests and a data form. These are questionnaires to survey opinions about sex role. Instructions and answer sheets are included. Answer the tests in the order that they are given. Read the General Instructions Form first, and then answer the Data Form. Then, raise your hand when you are finished so I can collect the Data form and the answer sheet for it. Keep the General Instructions Form because it has the number you will be using on all answer sheets. For each answer sheet enter the number in the boxes for Social Security number. Enter the test number in the form column, as follows:

Test 1 = A
Test 2 = B
Test 3 = C
Test 4 = D

Darken the appropriate boxes. Please answer all questions. Do not write on the test forms. There are no right or wrong answers, so take as long as necessary to formulate an opinion, but do not spend too much time on individual questions. Do not write your name anywhere. Your answers must be anonymous. When you are done with a test, raise your hand so I can collect the form and the answer sheet. After the last test, bring the test material and pencil to the desk. Thank you.
Appendix H

General Instructions
(Written Instructions)
General Instructions

This is a study of opinions about sex roles. Please answer the tests in the same order as they are. Fill out the Personal Data Blank provided. Please do not give your name or any other information that is not requested, because your answers must be anonymous. Participants will not be identified. The answer sheets will be scored and the results analyzed to determine group differences and similarities. After the necessary analyses are done, the answer sheets will be destroyed. Your participation or non-participation will not affect your grade in this course.

Here is the number you will be using for all answer sheets (total of 4 answer sheets)

Enter this number in the boxes for Social Security number.

Also, in all answer sheets enter the number on the top of the test form (or personal data blank) in the column marked form, in the following way:

For no. 1 mark letter A
For no. 2 mark letter B
For no. 3 mark letter C
For no. 4 mark letter D

Thank you very much for your participation and cooperation.
BIBLIOGRAPHY


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