AN ABSTRACT OF THE THESIS OF

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	CORRELATE	OF SELF-CONCEPT	
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The purpose of this study was to determine whether or not a correlation exists between the self-concept of males and their attitude toward equality for women. The study also sought to determine if differences in attitude toward equality for women exist between males in various biographical data groupings such as age, marital status, academic major, and so forth.

The Ghiselli Self-Description Inventory was utilized to measure the self-concept of individuals. The Women's Liberation Questionnaire was used to determine attitude toward equality for women. A sample of 378 male students participated in the study. The data were collected during the Winter Term of 1978, on the Oregon State University Campus.

Nine major hypotheses were considered in the study. These hypotheses concerned correlations between male self-concept and attitude toward equality for women, as well as significant differences

in attitude toward equality for women among males within: 1) four age group levels, 2) six academic major classifications, 3) three political philosophy categories, 4) two maternal employment groups, 5) nine hometown size levels, 6) two female sibling groups, 7) three religious background designations, and 8) two marital status groups.

The Pearson "r" correlation methodology was used to identify the correlation between male self-concept and attitude toward equality for women. A one-way analysis of variance (utilizing the F statistic), and the Student's "t" were used to identify significant differences in mean attitude-toward-equality-for-women values among males in various biographical variable groupings. The Scheffe method of multiple comparisons, another technique for showing significance, was used in conjunction with the F statistic to determine significant differences between unequal sample sizes.

The major findings were as follows:

- 1) No significant degree of correlation was found between male self-concept and attitude toward equality for women.
- 2) Males who were over 23 years of age achieved higher mean attitude-toward-equality-for-women values than did males who were younger.
- 3) No significant difference in attitude toward equality for women was found between males in six academic major classifications.

- 4) Males who were liberally oriented in political philosophy were more positive in their attitude toward equality for women than were males who were conservative.
- 5) Males with working mothers did not achieve significantly different attitude-toward-equality-for-women scores than did males with non-working mothers.
- 6) Significant differences in attitude toward equality for women were not found between males in nine levels of hometown size.
- 7) Males with sisters did not achieve significantly higher attitude-toward-equality-for-women scores than did males with no sisters.
- 8) Significantly lower attitude-toward-equality-for-women scores were achieved by males with strong religious backgrounds as compared to males with no religious background.
- 9) Married men tended to have more positive attitudes toward equality for women than did single males.
- 10) The attitude toward equality for women held by Oregon State
 University male students was found to be fairly positive.
- 11) Oregon State University male students scored neither very high nor very low on the test of self-concept.

Male Attitude Toward Equality for Women as a Correlate of Self-Concept

by

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MALE ATTITUDE TOWARD EQUALITY FOR WOMEN AS A CORRELATE OF SELF-CONCEPT

CHAPTER 1

INTRODUCTION

The culture of a society provides the framework within which its members must operate and the standards to which they must conform. Codes of acceptable male and female behavior emerge from the framework and the standards. Through the process of socialization, men learn to live their lives within the confines of a "masculine" code, and women learn to live theirs within a "feminine" one -- each code with its own set of norms, values, and beliefs (Epstein, 1973). This study examines what happens when the codes are questioned. In particular, it examines what happens when women cease to conform to their pre-determined "feminine" code, and seek instead a life of greater self-determination.

Statement of the Problem

The power of the process of socialization is well illustrated by the following story. Journalist Bill Moyers one day asked his young daughter what she wanted to be when she grew up. Her immediate reply was that she wanted to be a nurse. Noting her interest in medicine Moyers went on to ask her why she had not chosen to be a

doctor. "Don't be silly, Daddy," was her reply, "I'm just a girl" (Moyers, 1975, p. 1). Moyers was jolted into a sad reality by his daughter's response, for he realized that some invisible and inherent force in her social environment had been working on the consciousness of this nine-year old girl to cause her to see her potential as limited simply by virtue of having been born female. And she is not alone.

Throughout the history of this country, either blatantly or subtly, little girls and women have been asked to believe in their inferior intellectual capacities, in their inability to deal with the larger issues, in their lack of political acumen, in their ineptness with financial matters, and in their lack of athletic ability (O'Neill, 1971). To be sure, women have had their arena of competence. Highly intuitive, sensitive to the needs of others, nurturant, superior to men in matters moral and spiritual, and armed with life-giving powers, they have been exceptionally well suited, so they have been told, to the needs of family and home (O'Neill, 1971). Such is the foundation upon which the American social order has based its male and female role designations. It is a strong foundation, deeply rooted and not at all amenable to change.

Throughout our history, however, there have been, and there continues to be today, women of courage and strength and intelligence who refuse to accept the notion of their inferiority. These women have striven to break away from the traditional role which society

proclaims is theirs. They have fought for the right to choose their own roles in life and to achieve equality of access to opportunities in making that choice (Pollock, 1972). In so doing they have gained legal support, greater professional and educational options, more mobility and independence of action. The changes that have accompanied their efforts, needless to say, have exerted profound effects on family, economy, social values, and the bases of self-identification and sex-roles. In a traditionally male-oriented society, the changes, while generally accepted as inevitable, are not necessarily welcomed, for they are seen by some as assaults upon the established order of things (Chafe, 1977). Change, it seems, is a threatening force to some individuals, and it is well to try to understand why this is so.

Festinger (1964) has looked into the problem of fear of a change in women's roles, and he, Ausubel (1952), and others, have concluded that self-concept may play an important role. The sense of self and the perception of one's self-worth, they posit, are largely a function of one's social frame of reference. Rogers (1959) tells us that the concept of self is relatively stable and defends itself against attempts at alteration. If, therefore, the social frame of reference is changed, as might be accomplished by a shift in women's roles from the traditionally supportive to the more independent mode, a corresponding resistance to change would take place in males who

have based their self-concept on the former mode. In other words, the male would take steps to defend his self-concept against a change in women's roles. It is known, however, that not all males resist change. Indeed, some males promote a move toward a more equalitarian society. It is this point upon which the present study focuses. What is it that makes the difference between those males who endorse steps toward equality and those who resist them, between those who fear a change and those who do not?

Miller (1974), in his research on this issue, has found that one's degree of self-concept, or level of self-esteem, is significantly related to how one views the women's rights movement. He states:

"Acceptance of principles related to the women's rights movement seems to be significantly related to high levels of self-esteem. Contrarily, rejection of some of the principles related to the women's rights movement seems to be related to low levels of self-esteem" (p. 40).

Ausubel's (1952) earlier study had produced results similar to

Miller's. He found that those individuals possessing positive selfconcepts would not be threatened by social change, but would welcome
an equality with their counterparts.

This study, then, is concerned with a further examination of the role that male self-concept plays in the attitude that men have toward equality for women. The data that is collected and analyzed should provide further insight into the conditions necessary for effective and

non-threatening social change. Beyond the major hypothesis which will be examined, the study will also concern itself with the effect that certain biographical variables may have on male attitude toward equality for women. Mothers' employment history, for instance, which has been seen by Rossi (1964) as playing a part in affording children a greater degree of sex-role freedom, will be examined, as will be the effect of female siblings on attitude. Religious and political philosophy, which Miller (1974) and others have found to be significantly correlated to attitude, will also be examined. Further examinations of the data will concern the effect that size of hometown, marital status and age may have on attitude. In addition, because a 1972 study by McMillan showed a difference in attitude toward equality for women among various academic majors, a further investigation of attitude differences between majors will be conducted.

The results of this study should assist those who are concerned with bringing about a more equalitarian social order a greater insight into the personality characteristics and environments which inhibit the achievement of equality. Further, the results should stimulate society in general into questioning the appropriateness in today's world of perpetuating out-dated norms of acceptable male and female relationships and sex-roles. The results should also contribute to a greater understanding of the source of negative attitudes toward equality for women. Lastly, the results of this study should expand

the body of knowledge in sociology and psychology which is concerned with sexism and feminism. Historian Robin Jacoby has written that:

"continued research on women is essential for developing a deeper intellectual understanding of the world in which we live. Such research is also a necessary precondition for affecting meaningful social change that will lead to a better world for both men and women" (Van Dusen and Sheldon, 1976, p. 107).

It is in the spirit of this statement that this research is undertaken.

Hypotheses

Previous studies by Miller (1969), Rossi (1964), McMillan (1972) and others, have been utilized in developing the specific hypotheses of this study. Since the attitude that men have toward equality for women has the potential power of effecting the outcome of women's struggle for equality, it is appropriate to examine why some males have positive and supportive attitudes toward equality for women while others oppose moves toward a more equalitarian society.

Miller (1974) has identified level of self-esteem as being significantly correlated to male attitude toward equality for women, particularly in terms of a male's religious orientation. Apart from self-concept, Rossi (1964) has shown that maternal employment may have an effect on attitudes, since children of working mothers have been found to be less rigid in their sex-role expectations. Further, McMillan (1972) has suggested that attitudes toward women vary according to academic

major of students. Utilizing Holland's (1966) classification scheme for vocations and major fields (refer to Appendix A), which sorts people into relatively homogeneous groups that have predictable attributes, McMillan's thesis will be further examined.

The following null hypotheses then, will serve as a focal point for this research:

- 1) There is no significant degree of correlation between the self-concept of males and their attitude toward equality for women.
- 2) There are no significant differences in the mean attitudetoward-equality-for-women scores for males in four age group levels.
- 3) There are no significant differences in the mean attitudetoward-equality-for-women scores for males in seven academic major classifications.
- 4) There are no significant differences in the mean attitude-toward-equality-for-women scores for males in three political philosophy groups.
- 5) There is no significant difference between the mean attitude-toward-equality-for-women scores for males with working mothers and males with non-working mothers.
- 6) There are no significant differences in the mean attitudetoward-equality-for-women scores for males in nine population levels.

- 7) There is no significant difference between the mean attitude-toward-equality-for-women scores for males with sisters and males with no sisters.
- 8) There are no significant differences in the mean attitudetoward-equality-for-women scores in three religious groups.
- 9) There is no significant difference between the mean attitude-toward-equality-for-women scores for married males and single males.

Definitions

For purposes of clarity, the following definitions are provided for the present research:

- 1) Attitude: An organization of several beliefs focused on a specific situation or object, predisposing one to respond in some preferential manner (Rokeach, 1968).
- 2) Equalitarian society: A society in which "no one is forced into a pre-determined role on account of sex -- where women and men have the option to plan their lives as they themselves choose" (Chafe, 1977, p. 151).
- 3) Equality: The state of being equal, that is, of having the same rights, privileges, ability, rank, etc.; especially the state of having equal political, economic, and social rights.
- 4) Self-concept: The way individuals see themselves; a

reflection of the unique way individuals organize their goals, competencies, beliefs and values (Cohen, Fink, Gadon, and Willits, 1976); a person's perception of self-worth (Rogers, 1959). Self-esteem, which is described by Korman (1966) as being people's characteristic evaluation of themselves and what they think of themselves, is used synonymously with self-concept in this study. In addition, the term self-assurance is described by Ghiselli (1963) as an indicator of positive self-concept and is the name given to the scale within the Ghiselli Self-Description Inventory which is used in this study to measure self-concept.

- 5) Sex discrimination: Making distinctions or perceiving differences in individuals on account of sex; a showing of difference or favoritism in treatment of individuals based on sex.
- 6) Sex-role: A pattern or type of behavior expected of or assumed by an individual based on the sex of that individual; a particular set of behaviors and attitudes that accompany a given sex in a social system.
- 7) Social change: Change is a transformation of character or replacement with something else. Social change -- through radicalism, partial alteration, or minor modification -- means affecting the existing system under which human

- beings live together and interact so that the system takes on a different character. In its broadest sense, social change can be defined as the increase or decrease in any social variable (Hage and Aiken, 1970).
- 8) Social frame of reference: The external reference points or social phenomena which come into play in the development of one's concept of self or self-worth. In interacting with their social environment, individuals form certain images of themselves, and the behavior and attitudes of others toward them tend to reinforce these images. Thus one's self-concept can be said to be a function of one's social frame of reference (Rogers, 1959).
- 9) Student: Any male person enrolled at Oregon State University during the Winter Term of 1978, without regard to age, class level, race, or marital status.
- 10) Women's rights movement: The social movement by women to win political, economic, and social rights equal to those of men, and to choose for themselves the role which is most appropriate to their competencies and inclinations; the struggle to eradicate sex discrimination. In this study, feminism and women's liberation shall be used synonymously with women's rights movement.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

This chapter will provide a framework for studying the issue of attitudes toward equality for women, and review the influence that self-concept may have on the development of attitudes. First, a historical perspective of feminism in America is presented. Second, the literature concerning the changes brought about by the women's movement is reviewed. Next, a look is taken at the impact of these changes. Finally, male attitude toward equality for women as a function of self-concept is examined.

History

It has been documented in the writings of history that early feminists were confronted with a network of ideas, prejudices, and almost religious emotionalism that simultaneously elevated and degraded the American woman in the 19th Century. As one historian has noted, "the cult of true womanhood made central virtues of piety, purity, submissiveness, and domesticity" (O'Neill, 1971, p. 7). Women, it was believed, were morally and spiritually superior to men because of their highly developed intuition, refined sensibilities, and especially because of their life-giving maternal powers which

defied men's comprehension. But it was also held that women were weaker than men, inferior to them in cognitive ability, and wholly unsuited to the rough world outside the home. The "cult" of which O'Neill (1971) speaks became deeply and strongly entrenched in the American social order, and those who occupied the position of advantage soon believed it was the only possible and reasonable order. Once established, this order took on an aura of infallibility, for as Cooper and Cooper (1974) aptly point out, "there is nothing more innately human than the tendency to transmute what has become customary into what has been divinely ordained" (p. 277).

The First Movement

There were, however, a few courageous and now-historic women who dared venture outside the boundaries delineated by the "cult." In what Pollock (1972) has called the "first movement," relatively small groups of women waged long steadfast battles -- primarily against specific issues -- and gleaned occasional victories. Receiving their impetus from the temperance and abolitionist efforts, Susan B. Anthony and Elizabeth Cady Stanton, for instance, won, in the 1860 New York legislature, the right for women not only to own property but to collect and control their own wages and to sue in court. These rights, as stated in the Married Women's Property Acts, had required a discouragingly long gestation period, however,

for they came only after 12 years of annual petitions signed by thousands of women. In another example, the Grimke sisters, Lucretia Mott, and others discovered that it was easier to enfranchise the black man than the white woman. It took a 72 year struggle for women to earn the right to vote in public elections, and it happened only after some women, Carrie Chapman Catt among them, had marched, protested, and even gone to jail. Ironically, the victory was not entirely satisfactory, for when the 19th Amendment to the Constitution had been secured, men were still left in clear possession of the commanding places in American life, and many women lapsed into indifference, returning to their traditional way of life. The "first movement," O'Neill (1971) tells us, essentially ended in 1920.

A Time of Little Progress

Nevertheless, the period of relative prosperity and social change of the 1920's, as Pollock (1972) reports, kept alive, to some extent, the seeds of women's discontent with their lot, and saw "some advances in the social and economic status of women" (p. 11). It was, for instance, during this period that Alice Paul and the Woman's Party initiated their drive for the Equal Rights Amendment to the Constitution (O'Neill, 1971). Unfortunately, the Depression and World Wars I and II halted some of the gains and set a backward

trend for women. Men, returning home from death-filled foreign wars to women who had missed them, found it relatively easy to satisfy their "psychological need to create new life" (Pollock, 1972, p. 11). The "baby boom" had its effect on women, and Betty Friedan (1963) contends that it was during this period that women fell under the influence of what she called the "feminine mystique." As defined by Friedan in her 1963 book of the same title, the term denotes the congruence of attitudes and values that defines a woman solely as a function of someone else (her husband or children) or something else (her homemaking activities). If we add this to Pollock's (1972) point that the attributes valued most highly in American culture -- individual striving, professional or political ambition, financial success, creativity, commitment to larger issues -- were all deemed abnormalities in women, it is reasonable to conclude that by the 1960's women had not progressed far from the "cult" of the "first movement." Only the name had changed. It was now called the "mystique." This image of the happy housewife shaped the lives and expectations of a whole generation of American women.

The Second Movement

The "mystique," however, claims Friedan (1963), could not and did not last. The 1960's were a time of turbulent social upheavals,

and the Civil Rights Movement and peace marches in protest of the Vietnam War thrust many women into social action. During this period, the "put-down treatment" women received from their male co-workers created a resentment which, Tripp (1974) believes, gave rise to a new wave of feminism. The anger of these women and the frustrations of the middle-class women who refused to remain restricted to children, church and kitchen came together in 1966 to create the National Organization for Women, an organization devoted to the achievement of independence and equality for women.

At this time too, other influences were being felt. The "pill," for example, began to change the ground rules for male-female relationships, allowing the birth of children to be more carefully timed and allowing women to have more control over their reproductive system. The economics of the time saw many women entering the work force, either because the husband's income needed to be supplemented, or because more and more women were becoming heads of families, or simply because more "extras" were desired. What women found in the world of work was a system of wages heavily biased in favor of the male. The increased mobility of Americans allowed women to travel widely and independently. Instant communication, especially of television, exposed women to different kinds of lives. The increased longevity of humans had its implications for women who would be faced with 40 years of life after the "nest"

emptied. Moreover, women were becoming increasingly more educated as institutions of higher education began opening more and more doors to them (Friedan, 1963). All this and more spawned a feminist movement which some have called the "second movement." What differentiated this movement from the first, however, writes Tripp (1974), was "the recognition that all aspects of human behavior are involved in equality for women" (p. 15), not just the specific issues with which the "first movement" had been concerned. What is more important, whether they supported the concept of equality for women, resented it, or sat on the fence, Americans became universally aware of the issue and of the necessity for change. Cooper and Cooper, writing in 1974, suggested that the tendency of women to assume a position of equality involved then, and continues even more to involve today, a profound psychic and material adjustment and change. What follows is an examination of those adjustments and changes.

Progress Towards Equality

In 1907, William Thomas wrote that it was "not impossible that the increased participation of women in our civilization would contribute new elements, change the stress of attention, disturb the equilibrium, and force a crisis which will result in the reconstruction of our habits on more equitable and sympathetic principles" (p. 314).

Thomas could not have known how prophetic were his words. In 1978, the women's rights movement in America has become a major force for change within our socity. Women have indeed increased their participation (O'Neill, 1971). Any future profile of America, if it is to be accurate, must reflect this increased participation and must be seen as one of change. Projected increases in the total population show that women are expected to outnumber men by 6.9 million to 7.9 million by the end of this century (UNESCO Report, 1977). With growing numbers of women having decided they will no longer tolerate or submit to old ways, some adjustment in the way men and women have lived their lives seems inevitable (Chafe, 1977).

Not a day goes by when one does not hear or read or see in the media at least one assessment of the impact of the women's movement. A cursory inspection of the literature reveals a proliferation of writings and research which provide evidence of the changes that have been brought about by the movement and the effect that those changes are having on society. Mason and Czajka (1976) report in one of their studies that comparisons between 1970 and 1973 show a consistent movement towards 1) the endorsements of husbands sharing housework with wives, 2) the rights of women to keep jobs while bearing children, 3) the rights of women to be considered for top-level jobs on an equal footing with men, and 4) the psychological feasibility or moral acceptability for women of a life without marriage

and motherhood. Yankelovich (1974), in a study regarding the morality of today's youth, found that a majority of young people today, both college and non-college, believe women should receive equal pay for equal work. They also believe that women should be free to take the initiative in matters of sex, that men and women share the same essential nature, and that women's relationships to other women are just as important as their relationships to men.

More evidence of change has been noted by Kamarovsky (1973) who surveyed the attitudes of college men toward women. She found that 70% of her male sample reported no strain in companionship with women who displayed intellectual qualities. This led her to conclude that intelligence is no longer considered a female abnormality and that the imperative of male superiority is giving way to the ideal companionship between equals. In another study, Mason and Czajka (1976) produced evidence of considerable and rather widespread changes in women's sex-role attitudes since the mid-1960's. Further, their comparisons with 1970 data showed a consistent movement toward a more equalitarian sex-role stance. Additional investigations by Nelson and Goldman (1969), and McMillan, Cerra and Mehaffey (1971), indicate that men are becoming more accepting of a career role for married women. This finding is further supported by Van Dusen and Sheldon (1976) who report that two-career families in which both the husband and wife are employed characterize a majority

of all United States families.

Perhaps the most telling evidence of the changes which have been brought about by the women's movement, however, is the relative ease and speed with which legislation concerning sex discrimination is enacted. In a little more than a decade in the United States, legislation has been passed banning sex discrimination in almost every aspect of life -- particularly employment and education. It is a well known fact that American women have been granted more legal rights of equality than have women of any other country of the world. As a result of this legal backing, women are gradually breaking through some of the traditionally male bastions of this country. Where once they were thought capable of only the supporting roles, women now command positions of leadership, and it is becoming more common to see women's names on organizations charts, in the political arena, and on sports rosters.

The essential message of these studies and writings is that the hardbound traditional role for women in American society is being questioned and it appears to be undergoing change.

A Closer Look at Progress

Little doubt can exist that now and during the last several decades of this century, the changes that women have affected do and will exert a profound effect on family, economy, social values, and

most importantly, on the bases of self-identification and sex roles. However, it is wise at this point to look further at the literature to examine these changes more closely.

Chafe (1977) points out that there is a pervasive assumption that extending legal rights and franchise to women confers equal status upon them and provides equality of access to opportunities. It is important to realize, as West (1975) suggests, that permission is not the same as freedom. Freedom is an inner condition which cannot be given to anybody. Victims of sex discrimination understand this well for they have seen the effect of the undercurrent of less formal patterns of discrimination which effectively perpetuate the status quo. Equality for women cannot occur in a vacuum, according to Chafe (1977), but requires, if it is to survive, "a collective commitment to new values of social interaction" (p. 168). Matina Horner (1972) agrees that the possibility of equality depends not only on removing social barriers but also on altering "beliefs that the human beings involved have of themselves" (p. 165). This need for more than a superficial change made itself felt in Mexico City at the World Conference for International Women's Year in July of 1975. One of the strongest statements to come from the Conference concerned the need for a profound change in attitudes -- on the part of both men and women (Report of the National Commission on the Observance of International Women's Year, 1975).

Recognizing that progress has been made, the fact must also be accepted that barriers to full equality of opportunity for women continue to exist. Some have said that the greatest barrier is the culture of masculinity. The pressures on male children to conform to sex stereotypes are perhaps even more severe than those on female children. "No matter how low down the ladder a man is in occupation, physical strength, or toughness," states Chafe (1977), "he is still expected to appear strong and dominant in his relations with women" (p. 158). Goldberg (1972) adds strength to this thesis in his article on misogyny. He found that men who are victims of the culture of masculinity -- and whom he labels "misogynous" -- are likely to be authoritarian and to have a high need for power. That power is usually exerted over women. Further, Mintz (1974) writes, males learn early in life that they are superior to 50% of the population, and they take steps as they grow older to defend that superiority. That remnants of the old "cult" of the "first movement" and "mystique" of the "second movement" are still with us is abundantly clear from the Yankelovich study of morality in 1974. The study, while revealing definite progress, shows that a majority of today's college students still reject the idea that women can do almost any job as well as men and that women do not need men and children to be happy.

Yes, the equality that women have gained and the changes they have wrought are fragile. Kamarovsky's (1973) study sums up this

fragile nature:

"In sum, the right of an able women to a career of her choice, the admiration of women who measure up in terms of the dominant values in our society, the lure but also the threat that such women-present, the low status attached to housewifery but the conviction that there is no substitute for the mother's care of young children, the deeply internalized norm of male occupational superiority pitted against the principle of equal opportunity irrespective of sex -- demonstrate ambivalences and inconsistencies on the part of college men which are bound to exacerbate role conflicts in women" (p. 121).

A quote from a senior male in Kamarovsky's (1973) study illustrates this ambivalency succinctly: "It is only fair to let a woman do her own thing, if she wants a career. Personally, though, I would want my wife at home" (p. 118).

Change Creates Conflicts

Women's so-called biological destiny and "sexist ideology" continue to distort our perceptions of male and female roles in spite of significant breakthroughs. It is true that outspoken and dedicated women, and some men, have, over the last decade, compelled the courts and legislatures to view women from a different perspective. However, none can deny that true equality will not be found in the courts, in the legislature, or at the polls. It will have to be found in the hearts and minds of the people involved. This should not be surprising, for it is true that the issues raised by feminism go to the

root of people's personal as well as social identity. Chafe (1977) has reported that during the 1960's, for example, "many men believed that the women's movement was conducting an insidious campaign to undermine their strength, deny their authority, and destroy their self-image" (p. 134). In the historically male-dominated American society, the disruption of the status quo by those who seek change is, indeed, bound to create conflict. To quote Chafe (1977):

"No movement for social change threatened the establishment order more than the drive for women's liberation. The movement carved out new grounds of social protest, assaulted some of the most entrenched cultural assumptions of the nation, and sought to alter living patterns fundamental to the perpetuation of the social structure as it had existed" (p. 81).

Assaulted. Threatened. These are strong words which, if they are to be believed and taken seriously, have the potential of rendering people vulnerable and insecure.

Some men, of course, do not feel threatened or assaulted.

Some men do not believe in their superiority over women. And they do not fear the changes brought about by the women's movement (Miller, 1974). It is important to know this, for Horner (1972) believes that the attitude that men have held toward the appropriate female role has led women to fear and avoid success. If her belief is accurate, it if is true that the attitudes of males can have such influence over women, it may well be that the success of women's

struggle for equality rests on whether or not men accept the principles upon which the women's movement is founded. It would be wise
then to attempt to learn more about what makes the difference between
those men whose attitudes are positive toward the women's movement,
and those whose attitudes are negative.

Self-Concept as an Attitude Factor

It has been suggested by Rogers (1959), Ausubel (1952), and others that people's perception of themselves and their self-worth is largely a function of their social frame of reference, and assumes a constancy over time and across situations. Coopersmith (1967), for example, in his studies on self-esteem, has stated that although the idea of self is open to change and alteration, it appears to be relatively resistant to such changes. Once established, it apparently provides a sense of personal continuity over space and time, and "is defended against alteration, diminution, and insult" (Coopersmith, 1967, p. 21). The results of a study by Korman (1967) further show that individuals tend to seek out and accept those situations which seem to be most in keeping with their own self-concept. And males, according to Moffett (1975), are more inclined to commit themselves to maintaining their "masculine" self-concept than women are to maintaining their "feminine" one. If, therefore, the social frame of reference is altered, as might be accomplished by a shift in women's roles, a corresponding resistance to change would be anticipated in men.

That resistance to change has taken place cannot be denied. It is general knowledge, however, that some men have chosen not to resist, but rather have promoted steps toward a more equalitarian society. In his attempts to determine what makes the difference between those men who resist and those who promote, Ausubel (1952) has posited that males with negative self-concepts, or low levels of self-esteem, would most probably be threatened by a liberally oriented women's rights movement, whereas males with high levels of self-esteem would tend to be less threatened by this orientation. Stated another way, those possessing positive self-concepts would not be threatened by social change, but would welcome rather an equality with their counterparts. No devaluation of self-concept would take place, but rather a growth of respect among equals. Further, Miller (1974), in his studies concerning male attitude toward women's rights, has shown that:

"Acceptance of principles related to the women's rights movement seems to be significantly related to high levels of self-esteem. Contrarily, rejection of some of the principles related to the women's rights movement seems to be related to low levels of male self-esteem" (p. 40).

Kamarovsky's (1973) study would tend to support Miller. She found that 30% of the males in her sample sought to avoid stress on dates

by dating women who posed no intellectual threat. Under the old "cult" and "mystique" intelligence was deemed an abnormality in women, so it can be concluded that intelligence in women represents a shift in women's role, and therefore constitutes a potential threat to the male of low-level self-esteem.

Yet another study by Worrell and Worrell (1971) provides evidence that males who are independent, capable, thoughtful and self-assured tend to support the women's rights movement. Since they are men of quality, proclaimed the participants in the National Women's Conference in Houston in 1977, they are not threatened by a woman of equality (Oregonian, November 20, 1977). Because these males are more secure and confident in their own capabilities, they do not fear alterations in their social frame of reference. The greater the ego strength, theorizes Rogers (1959), the more able one is to attain one's own goals, and therefore the less difficult it is to accept the goals and values of others.

Self-concept, it would appear, is an important determinant in the attitude held by males toward women's rights. It, therefore, may strongly influence the attainment of the goal of equality for women.

The intent of this study is to investigate this thesis.

Summary

While the conditions of subjection of women and the feminine

response to them have varied over time, men have uninterruptedly dominated women throughout history. Cooper and Cooper (1974) succinctly state:

"There have been important advances for women, especially since the 18th Century. Yet nearly all still face discrimination, and the greatest number follow the traditional domestic route from cradle, to alter, to housework and motherhood, and finally to grave. A woman's world, though it has improved, remains more intellectually limited, culturally derivative, socially atomized, geographically restricted, and economically dependent than a man's of the same socioeconomic class" (p. 1).

It is true that women's subordinate position has not been completely eliminated, for deep-rooted and near-religious traditions continue to persist. But it can at least be said that modernization has shaken confidence in traditional beliefs concerning biological and psychological differences between the sexes and has questioned the appropriateness of conventional social roles of females. If one wants an accurate picture of America today, it is necessary to take into account the progress made by women in their struggle to eliminate sex discrimination and to achieve equality. It is also necessary to take into account the profound social changes that have accompanied that progress.

The changes, while superficially impressive, and while receiving supportive "lip-service," prove to be fragile upon closer examination (Kamarovsky, 1973). Change, it seems, is a threatening

force to many. The relationship that has existed between males and females has created a social frame of reference upon which the worth of many individuals has been based. To change that frame of reference is to tamper with one's worth, or one's concept of self. Self-concept is relatively stable and will resist attempts at alteration. It has been hypothesized, however, that the more positive one's self-concept, the less threatened one will be by the possibility of change. It is this hypothesis that the present study will examine.

CHAPTER 3

RESEARCH PROCEDURES

Introduction

This chapter provides information on the sample used in this study, as well as a description of the procedure for selecting the sample. It further describes the instruments used in the measurement of self-concept and attitude toward equality for women. In addition, it describes how the data were collected, as well as the statistical methodology utilized to analyze the data.

Description of the Sample

Male students attending Oregon State University were used as samples in this study. In the sample of students selected, no discrimination other than sex was made with regard to age, marital status, race or nationality. All class levels, freshmen through graduate were included. Of the 9,693 male students (Office of the Registrar) attending Oregon State University during the Winter Term of 1978, 808 were selected at random to serve in the study. An alphabetical listing of all students was secured from the Office of Student Services. From this list the students were selected using a random numbers table.

Of the 808 questionnaires which were sent to the participants,

15 were not deliverable for a variety of reasons and were returned unopened. Thus 793 individuals received the questionnaires. Of these 793 students, 398 (50%) responded. Of those responses, 20 questionnaires could not be used in the analysis because of incomplete or omitted items. Thus, 378 (48%) responses were used in the data analysis.

Measurement Tools

Each participant in the study was asked to complete a three-part survey. The first portion of the questionnaire consisted of biographical items such as age, academic major, political philosophy, hometown size, marital status, and other similar data. The second part of the questionnaire was composed of the Ghiselli Self-Description Inventory (Ghiselli, 1963), and the final part consisted of the Women's Liberation Questionnaire (Miller, 1974).

The Ghiselli Self-Description Inventory (SDI) was developed by Edwin Ghiselli in 1963. It is designed to obtain a picture of the traits one believes one possesses, and to assess how individuals describe themselves. Several scales make up the Inventory. One of them, the Self-Assurance Scale, has been utilized by Leonard (1975), Korman (1967), and in the present study to measure self-concept. The Self-Assurance Scale is a 31-item forced-choice adjective-pair scale. It is described by Ghiselli (1963) as measuring the "extent to

which the individual perceives himself (or herself) as being effective in dealing with the problems that confront him (or her)" (p. 57).

Leonard (1975) has found the SDI Self-Assurance scale to be a better measure of self-concept than the Q-sort self-ideal discrepancy measure which is frequently used for this purpose.

The validity of this scale has been determined in several ways.

First, the relationship between scores on the Self-Assurance Scale
and ratings on another index of self-perceived effectiveness has been
compared. The correlation between these ratings and scale scores
was 0.37. Second, the life histories of a sample applying for
management positions were examined and were rated for general
effectiveness in dealing with personal and occupational problems. The
correlation between ratings and scale scores in this instance was
0.66. Third, the relationship between the self-assurance scores
and success of a sample group of managers was found to have a
correlation coefficient of 0.19, a positive though fairly weak relationship (refer to Appendix B).

The Women's Liberation Questionnaire (WLQ) was developed by Thomas W. Miller in 1974. It is designed to assess attitudes toward principles related to equality and rights for women. The 20 questions on the WLQ are responded to on a six-point Likert-type scale ranging from "strongly agree" to "strongly disagree." Construct validity of the WLQ has been assessed by means of two groups of college males,

one supportive of women's rights and equality, and one opposed to women's rights and equality. Significant mean differences for the two groups on the WLQ were realized at t = 4.42, p < .01. Splithalf reliability using the Spearman-Brown formula yielded a coefficient of internal consistency for the entire inventory of r = .82 (Miller, 1974) (refer to Appendix B).

Method

Once the male students were randomly selected from an alphabetical listing of all students enrolled, they were sent the questionnaire. A cover letter explained the purpose of the study, gave instructions for completion and return of the survey, and requested their participation (refer to Appendix B). A self-addressed envelope was included in order to enable the respondents to return the questionnaire either through campus mail or to deposit it in a box located in the Memorial Union Business Office. No individual students were identified and the questionnaire was confidential. No attempt was made to determine who failed to return the survey.

After the initial mailing, a follow-up postcard was mailed to members of the sample to further encourage participation in the project (refer to Appendix B). Following the deadline for returning the questionnaire, participants (48%) responses were scored and keypunched onto computer cards. One card per respondent was used to

record both the biographical data and the scores on the WLQ and the Ghiselli SDI.

Data Analysis

The data analysis of the correlation between self-concept and attitude and significant differences between biographical data groupings was performed mainly with the use of the computer routine "Statistical Package for the Social Sciences (SPSS)" (Nie, Hull, Jenkins, Steinbrenner and Bent, 1975). For this study, the SPSS was utilized to compute correlation coefficients, means, variances, tabulations from groupings, analysis of variance, "t"-tests and F-ratios.

Testing of the hypotheses was performed through various techniques. The first hypothesis was tested by means of the Pearson "r" correlation coefficient (Courtney and Sedgwick, 1972). This provided for a test of the degree of linear relationship which existed between self-concept scores and attitude-toward-equality-for-women scores. The second, third, fourth, sixth, and eighth hypotheses were tested by means of the F-statistic (Malec, 1977). In addition, because the sample sizes were not equal, the Scheffe (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1975) method of multiple comparisons was utilized. The Scheffe procedure is another technique for showing significance. By providing for an analysis of variance where several

means were being considered, it tested for the existence of significant differences between the mean attitude-toward-equality-forwomen scores for males in four age groups, for males in seven classifications of academic major, for males in nine levels of hometown sizes, for males in three political philosophy categories, and for males in three religious designations. The fifth, seventh, and ninth hypotheses were tested by means of the student's "t" (Malec, 1977). The "t"-test is designed to determine if a significant difference exists between two means. This provided for a test of significant differences between the mean attitude-toward-equality-forwomen scores for males whose mothers had never worked outside the home and males whose mothers had frequently worked outside the home, for males who had no sisters and males who had one or more sisters, and for single males and married males. The "t" test used in the analysis of this data is appropriate for testing means of unequal sample sizes.

Last, although it was not meant to be a central focus of the research, the F-statistic and "t"-tests were run to determine whether or not significant differences existed between level of self-concept for males in all of the biographical groupings. In other words, the self-concept score was substituted for the attitude-toward-equality-for-women score in hypotheses two through nine, and the hypotheses were tested for significant differences. Since the data were

available, it was felt that the additional analysis might provide valuable information for future research (refer to Appendix C).

CHAPTER 4

ANALYSIS OF THE DATA

Introduction

This study focused on the attitude that males have toward equality for women and the relationship that might exist between the attitude and self-concept. Data were collected by means of two instruments: 1) the Ghiselli Self-Description Inventory (Ghiselli, 1963), which is designed to provide a measure of an individual's self-concept based on a series of paired personality traits; and 2) the Women's Liberation Questionnaire (Miller, 1974), which is designed to assess attitudes on issues related to equality and rights for women. The findings were obtained through a variety of data analysis techniques employed to 1) tabulate biographical groupings, 2) compute means, and 3) test hypotheses.

This chapter presents results of the data analysis in tabular form with a discussion of the rationale for the selection of the statistical methodology and the major findings obtained. The hypotheses are presented in the same order in which they are listed in Chapter 1.

Hypotheses

Each of the hypotheses was tested through parametric methods.

The Pearson "r" correlation technique was used to obtain a measure of the relationship between attitude toward equality for women and self-concept (Hypothesis 1). A one-way analysis of variance (using the F statistic), and the student's "t" statistic, were used to determine the existence of significant differences between mean attitude-toward-equality-for-women values for males in various biographical data groupings (Hypotheses 2 through 9).

Groupings in this study were unequal in size, therefore computation of the F statistic, as part of the analysis of variance (a robust test when sample sizes are equal), was followed by application of the Scheffe (Nie, Hull, Jenkins, Steinbrenner and Bent, 1975) procedure for comparing all possible pairs of group means. In this procedure, the groups are divided into homogeneous subsets, where the differences in the means of any group in a subset are not significant at $\alpha = .05$. The Scheffe procedure is exact for unequal group sizes, and is another technique for showing significance. The "t" test used in this analysis is appropriate for use where group sizes are unequal.

Hypothesis 1: There is no significant degree of correlation between the self-concept of males and their attitude toward equality for women.

The Pearson "r" correlation technique revealed no significant degree ("r" = .0026, α = .05, p > .05) of correlation between the

attitude of males toward equality for women and self-concept. Results of this test indicated that those with lower self-concept scores tended to score slightly higher on the attitude-toward-equality-for-women test, but the negative correlation coefficient was not nearly strong enough to warrant a rejection of the null hypothesis. Thus the null hypothesis is retained (refer to Table 1). The lack of any

TABLE 1

PEARSON "r" CORRELATION MATRIX OF SELF-CONCEPT AND ATTITUDE 1

Variable	Self-Concept	Attitude
Self-Concept	1.0000* (0) S = .001	0026 (378) S = .480
Attitude	0026 (378) S = .480	1.0000 (0) S = .001

^{*} Key: Table entry arranged as: coefficient/cases/significance

1 H_o:
$$\rho = 0$$

H₁: $\rho \neq 0$
Critical $\alpha = .05$, ** p > .05
 $t* = r \sqrt{n-2} / \sqrt{1-r^2}$

If computed |t*| > 1.96, reject Ho

If computed | t* | < 1.96, retain H

systematic relationship between self-concept and attitude toward women is illustrated in the scattergram presented in Figure 1.

Hypothesis 2: There are no significant differences in the mean attitude-toward-equality-for-women scores for males in four age group levels.

The test of this hypothesis revealed a significant difference $(\alpha=.05, p < .05)$ between the mean attitude-toward-equality-for-women values for males in the over 23 age group and males in the under 19, 19-20, and 21-23 age groups. Males in the over 23 category scored 7.5 points higher than males in the under 19 category, while males in the 19-20 and 21-23 groups were only one point apart in their scores. Results indicate that males who are older tend to have a more positive attitude toward equality for women. The null hypothesis is rejected (refer to Table 2).

Hypothesis 3: There are no significant differences in the mean attitude-toward-equality-for-women scores for males in six academic major classifications.

The analysis of variance performed in this instance revealed no significant differences (α = .05, p > .05) in attitude toward equality for women for males in six categories of academic major. Although the Social category (Education, Health and Physical Education, and Home Economics) had the highest mean value (\overline{X} = 86.7,

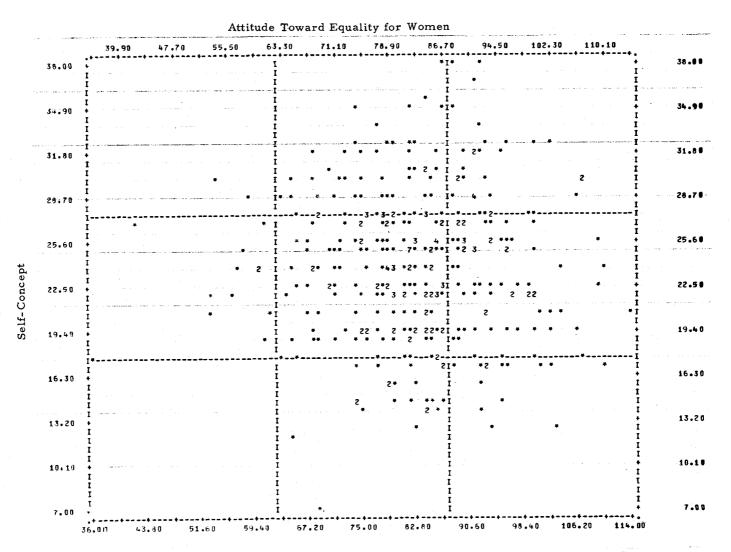


Figure 1. Seattergram of Self-Concept and Attitude-Toward-Equality-for-Women Test Scores.

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	
Between groups Within groups	3 374	2595.5366 44067.0348	865. 1789 117. 8263	7. 3428*	•
Total	377	46662.5714			

Age Group	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	95 Percent Confidence Interval for Mean
Under 19	39	79.5385	10.4952	1.6806	57.0000	109.0000	76.1363 to 82.9406
19-20	117	81, 1538	11.2898	1.0437	36,0000	107,0000	79.0866 to 83.2211
21-23	120	82,2000	10.9725	1.0017	53,0000	110.0000	80,2166 to 84,1834
Over 23	102	87.0294	10.3258	1.0224	58.0000	114,0000	85.0012 to 89.0576
Total	378	82,9048			36,0000	114.0000	
	Ungr	ouped Data	11.1253	.5722			81.7796 to 84.0299

¹ H_o: $\mu_1 = \mu_2 = \mu_3 = \mu_4$ * Critical $\alpha = .05$, p > .05

EFFECT OF AGE ON ATTITUDE TOWARD EQUALITY FOR WOMEN SCHEFFE PROCEDURE 2

Subset Number	Group		
Subset 1			
Age Group Mean	Under 19	19-20	21-23
Subset 2	79.5385	81. 1538	82,2000
Age Group Mean	Over 23		
	87.0294		

Range for the .05 level = 3.97 (tabular value), $\mu_{j} - \mu_{i} = 7.6755$. Range . $\frac{1}{n_{i}} + \frac{1}{n_{j}}$ standard error = ± 2.7) and the Conventional/Enterprising category (Business) had the lowest mean value ($\overline{X} = 81.4$, standard error = ± 1.2), the computed F probability demonstrated that there was a strong (p = .2817, α = .05) chance that these results could be due to sampling variation. The difference involved was not significant, thus the null hypothesis is retained (refer to Table 3).

Hypothesis 4: There are no significant differences in the mean attitude-toward-equality-for-women scores for males in three political philosophy groups.

Significant differences of the largest magnitude (α = .05, p < .05) were found in mean attitude-toward-equality-for-women values between groups of males divided according to political philosophy. The highest attitude scores were achieved by males who labeled themselves liberal in political orientation. The mean value for this group (\overline{X} = 87.5, standard error = \pm 1.1) was 10.7 points higher than that of the group which considered itself to be conservative (\overline{X} = 76.8, standard error = \pm 1.6). The F probability was computed at 0 to four significant digits. At most, the 5th digit would have been a 5, so it can be concluded that p < .00005. Thus even with a much smaller critical α , this hypothesis would still be rejected (refer to Table 4).

TABLE 3 $\label{table 3}$ EFFECT OF ACADEMIC MAJOR ON ATTITUDE TOWARD EQUALITY FOR WOMEN ANALYSIS OF VARIANCE $^{\rm l}$

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	
Between groups Within groups	5 372	775.5803 45886.9912	155. 1161 123. 3521	1.2575*	• • • •
Total	377	46662.5714	·		

Academic Major Classification	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	95 Percent Confidence Interval for Mean
Realistic	72	83, 1399	11.9309	1.4061	36.0000	110.0000	80.3353 to 85.9425
Realistic/Intellectual	93	81.6667	11.4809	1.1905	42.0000	107,0000	79.3022 to 84.0311
Intellectual	94	84,2128	10.8903	1.1233	59.0000	110.0000	81.9822 to 86.4433
Social	22	86.7273	12.5591	2.6776	65.0000	114,0000	81.1589 to 92.2957
Conventional/Enterprising	62	81,4032	9.6623	1.2271	60,0000	109.0000	78.9495 to 83.8570
Artistic	35	82.4571	10.3137	1.7433	54.0000	103.0000	78.9143 to 86.0000
Total	378	82.9048			36,0000	114.0000	
	Ungr	ouped Data	11.1253	. 5722			81.7796 to 84.0299

¹ H_o: $\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 = \mu_6$ * Critical $\alpha = .05$, p > .05

EFFECT OF ACADEMIC MAJOR ON ATTITUDE TOWARD EQUALITY FOR WOMEN SCHEFFE PROCEDURE $^{\mathbf{Z}}$

Subset Number	Group					
Subset I					-	
Academic Major Classification	Conventional/ Enterprising	Realistic/ Intellectual	Artistic	Realistic	Intellectual	Social
Group Mean	81.4032	81.6667	82.4571	83.1389	84.2128	86. 72 73

Range for the .05 level = 4.73 (tabular value);

$$\mu_j - \mu_i = 7.8534 \cdot \text{Range} \cdot \frac{1}{n_i} + \frac{1}{n_j}$$

TABLE 4

EFFECT OF POLITICAL PHILOSOPHY ON ATTITUDE TOWARD EQUALITY FOR WOMEN ANALYSIS OF VARIANCE¹

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	
Between groups	2	4560.0277	2280.0139	20,2387	
Within groups	363	40894.1909	112.6562		
Total	365	45454.2186			

Political Philosophy Group	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	95 Percent Confidence Interval for Mean
Liberal	103	87. 4563	10.8779	1.0718	56.0000	110.0000	85, 3303 to 89, 5823
Middle-of-the-							
Road	200	82.2800	9.8675	. 6977	42.0000	114.0000	80.9041 to 83.6559
Conservative	.63	76.7937	12.3447	1.5553	36.0000	107.0000	73.6847 to 79.9026
Total	366	82.7923			36.0000	114.0000	
	Ungr	ouped Data	11.1594	.5833			81.6453 to 83.9394

¹ H_o: $\mu_1 = \mu_2 = \mu_3$

^{*} Critical $\alpha = .05$, p < .05

Subset Number	Group
Subset 1	
Political Philosophy	Conservative
Group Mean	76. 7937
Subset 2	
Political Philosophy	Middle-of-the-Road
Group Mean	82.2800
Subset 3	
Political Philosophy	Liberal_
Group Mean	87.4563

Range for the .05 level = 3.48 (tabular value);

$$\mu_{j} - \mu_{i} = 7.5052 \cdot \text{Range} \cdot \frac{1}{n_{i}} + \frac{1}{n_{j}}$$

Hypothesis 5: There is no significant difference between the mean attitude-toward-equality-for-women scores for males with working mothers and males with non-working mothers.

The student's "t" test, utilized to determine whether or not a significant difference in attitude toward equality for women existed between males with working mothers and males with non-working mothers, revealed no significant degree ($\alpha = .05$, p > .05) of difference. Although the males with working mothers scored slightly higher, the difference was less than one point, with the two-tailed probability computed at .770. The null hypothesis, therefore, is retained (refer to Table 5).

TABLE 5

EFFECT OF MATERNAL EMPLOYMENT ON ATTITUDE TOWARD EQUALITY FOR WOMEN Student's "t" Test 1

Maternal Employment Group		Mean	Standard Deviation		Pooled Variance Estimate 2		
	Number of Cases			Standard Error	"t" Value	Degrees of Freedom	Two-tailed Probability
No Maternal Employment	149	82.6577	11.367	.931	*	375	. 770
Maternal Employ - ment	228	83.0000	10.967	. 72 6	/	313	• • • • •

 $H_0: \mu_1 = \mu_2$

^{*}Critical $\alpha = .05$, p > .05

² For H_0 : $\sigma_1^2 = \sigma_2^2$, the 2-tailed probability was 0.623

Hypothesis 6: There are no significant differences in the mean attitude-toward-equality-for-women scores for males in nine population levels.

The one-way analysis of variance utilized to test this hypothesis revealed slight but insignificant ($\alpha = .05$, p > .05), and inconsistent, differences in mean attitude values for males in the nine population levels. Males with hometown sizes between 5,000 and 10,000 scored 8.23 points higher in attitude than did those males with hometown sizes between 1,000 and 2,500. This difference was not significant. The null hypothesis is thus retained (refer to Table 6).

Hypothesis 7: There is no significant difference between the mean attitude-toward-equality-for-women scores for males with sisters and males with no sisters.

Results of the test for this variable revealed that there is no significant difference (α = .05, p > .05) in attitude toward equality for women between males who have one or more sisters and those who have none. It is interesting to note that males with no sisters scored slightly higher (0.59 points) than males with sisters. But with the two-tailed probability computed at .660, the difference is not nearly enough to reject the hypothesis, thus it is retained (refer to Table 7).

 $\label{eq:table 6}$ EFFECT OF HOMETOWN SIZE ON ATTITUDE TOWARD EQUALITY FOR WOMEN ANALYSIS OF VARIANCE $^{\rm l}$

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	
Between Groups	8	1950. 1706	243.7713	2.0042*	
Within Groups	367	44637.9890	121.6294		
Total	375	46588.1596			

Hometown Size Group	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	95 Percent Confidence Interval for Mean
Over 100,000	83	83,9398	9.8158	1.0774	58.0000	107,0000	81, 7964 to 86, 0831
50,000-100,000	44	82.4318	10.8465	1,6352	59.0000	110.0000	79,1342 to 85,7295
25,000-50,000	55	82.8000	10.9720	1.4795	53.0000	109.0000	79.8338 to 85.7662
10,000-25,000	71	85.1268	10.9361	1,2979	57.0000	110.0000	82.5382 to 87.7153
5,000-10,000	30	85.2667	10.4780	1.9130	67.0000	102.0000	81.3541 to 89.1792
2,500-5,000	22	80.0909	8.5016	1.8125	61.0000	100.0000	76.3215 to 83.8603
1,000-2,500	30	77.0333	12.7779	2.3329	42.0000	96.0000	72.2620 to 81.8047
Under 1,000	28	80.8214	15.1414	2.8615	36.0000	114.0000	74.9502 to 86.6927
Foreign	13	83.3846	9.9124	2.7492	68.0000	107.0000	77.3946 to 89.3746
Total	376	82.8989			36.0000	114.0000	
	Ungr	ouped Data	11.1461	.5748			81.7687 to 84.0292

¹ H_o: $\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 = \mu_6 = \mu_7 = \mu_8 = \mu_9$ * Critical $\alpha = .05$, p > .05

EFFECT OF HOMETOWN SIZE ON ATTITUDE TOWARD EQUALITY FOR WOMEN SCHEFFE PROCEDURE $^{\mathbf{Z}}$

Subset Number	-	Group				_		<u> </u>	
Subset 1									
Hometown Size	1,000-2,500	2,500- <u>5,</u> 000	Under 1,000	50,000-100,000	25,000-50,000	Foreign	Over 100,000	10,000-25,000	5,000-10,000
Group Mean	77.0333	80.0909	80.8214	82. 4318	82.8000	83, 3846	83,9398	85.1268	85.2667

Range for the .05 level = 5.61 (tabular value); $\mu_{j} - \mu_{i} = 7.7984 \cdot \text{Range} \cdot \frac{1}{n_{i}} + \frac{1}{n_{j}}$

Student's "t" Test Pooled Variance Estimate² Degrees of antn. Two-tailed Female Number Standard Standard Sibling Group of Cases Deviation Error Value Freedom Probability Mean No Sisters 90 83.3556 11.033 1.163 . 44* 376 .660 82.7639 11.169 . 658 l or More Sisters 288

TABLE 7

EFFECT OF SISTERS ON ATTITUDE TOWARD EQUALITY FOR WOMEN

Student's "t" Test

Hypothesis 8: There are no significant differences in the mean attitude-toward-equality-for-women scores for males in three religious background groups.

Significant differences (α = .05, p < .05) were found between the mean attitude values for males in the three religious background groups. Males who reported a strong religious background scored 5.6 points lower in attitude than males who indicated they had no religious background (\overline{X} = 79.8, standard error = \pm 1.0 and \overline{X} = 85.4, standard error = \pm 1.4, respectively). A higher attitude-toward-equality-for-women score seems to be associated with less religious background. The null hypothesis is therefore rejected (refer to Table 8).

 $^{^{1}}$ $_{0}$: $\mu_{1} = \mu_{2}$

^{*} Critical $\alpha = .05$, p > .05

² For H_o: $\sigma_1^2 = \sigma_2^2$, the 2-tailed probability was 0.911

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	
Between groups	2	1453,0184	726.5092	6.0102*	
Within groups	374	45208.7323	120.8790		
Total	376	46661.7507			

Religious Back- ground Group	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	95 Percent Confidence Interval for Mean
Strong Back-				-			
ground	101	79.7921	9.7799	.9731	53,0000	107.0000	77.8614 to 81.7228
Moderate/Slight	1						
Background	222	83.7297	11.6917	.7847	36.0000	114.0000	82.1833 to 85.2762
No Background	54	85.3519	10.1259	1.3780	56.0000	110,0000	82.5880 to 88.1157
Total	377	82.9072			36.0000	114.0000	
	Ungr	ouped Data	11.1400	.5737			81.7790 to 84.0353

¹ H_o: μ₁ = μ₂

EFFECT OF RELIGIOUS BACKGROUND ON ATTITUDE TOWARD EQUALITY FOR WOMEN SCHEFFE PROCEDURE 2

Subset Number	Group	
Subset 1		
Religious Background	Strong Background	
Group Mean	79. 792 1	
Subset 2		
Religious Background	Moderate/Slight Background	No Background
Group Mean	83,7297	85, 3519

$$\mu_j - \mu_i = 7.7743 \cdot \text{Range} \cdot \frac{1}{n_i} + \frac{1}{n_j}$$

^{*} Critical $\alpha = .05$, p < .05

Hypothesis 9 There is no significant difference between the mean attitude-toward-equality-for-women scores for married males and single males.

Once again, using the "t" test, a significant difference ($\alpha = .05$, p < .05) was found in mean attitude values between married males and single males. Married males scored significantly higher (3.5 points) than single males ($\overline{X} = 85.9$, standard error = ± 1.5 and $\overline{X} = 82.4$, standard error = ± 6 , respectively). Married males, it appears, have a more positive attitude toward equality for women than do single males. The two-tailed probability was computed at .027 thus supporting the rejction of the null hypothesis (refer to Table 9).

TABLE 9

EFFECT OF MARITAL STATUS ON ATTITUDE TOWARD EQUALITY FOR WOMEN Student's "t" Test¹

				1	Pooled Variance Estimate ²		
Marital Status	Number of Cases	Mean	Standard Deviation	Standard Error	"t" Value	Degrees of Freedom	Two-tailed Probability
Single	322	82,3789	11.054	.616	-2,22*	376	. 02 7
Married	56	85.9286	11, 148	1.490	-2		•

 $^{^{1}}$ $_{o}$: $\mu_{1} = \mu_{2}$

^{*}Critical $\alpha = .05$, p < .05

² For H_o : $\sigma_1^2 = \sigma_2^2$, the 2-tailed probability was 0.896.

Summary of Hypothesis Analysis

Generally, the statistical tests on the hypotheses revealed no significant correlation between male attitude toward equality for women and self-concept. Significant differences in attitude were found, however, between males grouped on the basis of four variables -- age, political philosophy, religious background, and marital status. There were found to be no significant differences in attitude toward equality for women between males grouped according to academic major, maternal employment, female sibling, and hometown size.

Summary of Hypothesis Testing with Self-Concept as Independent Variable

No significant differences between mean self-concept values were revealed for male groups on the basis of these variables:

1) four age group levels, 2) six academic major classifications,
3) three political philosophy categories, 4) working mothers versus non-working mothers, 5) nine hometown size levels, 6) sisters versus no sisters, 7) three religious background designations, and 8) single versus married.

Interestingly, the Social category of academic major (Education, Health and Physical Education, and Home Economics), which had the highest mean attitude-toward-equality-for-women value, had

the lowest mean self-concept value. Individuals in the Intellectual category (Science, Pharmacy, Oceanography, etc.) had the closest relationship between self-concept and attitude toward equality for women, for they were second highest in attitude and highest in self-concept. A further point derived from this analysis is that married males achieved a more positive self-concept score than did single males. The analysis previously showed that attitudes of married males toward equality for women were also significantly more positive than those of single males. It should be noted, however, that no differences found in the analyses using self-concept as the independent variable were deemed significant (refer to Appendix C).

Summary of Biographic Information

Two hundred and thirty-seven (62%) of the male students in the sample were between the ages of 19 and 23. With regard to academic major classification (refer to Appendix A), 72 (19%) were Realistic, 93 (25%) were Realistic/Intellectual, 94 (25%) were Intellectual, and the remaining 31% were divided among the Social, Conventional/Enterprising, and Artistic Classifications. The students were mostly liberal or middle-of-the-road in political philosophy (28% and 55%, respectively), and many (59%) had moderate to slight religious backgrounds. With regard to marital status, 322 (85%) were single, and most (76%) had one or more sisters (refer to Appendix D).

CHAPTER 5

SUMMARY AND CONCLUSIONS

Introduction

This study sought to determine whether or not a correlation exists between the self-concept of males and their attitude toward equality for women. It also sought to determine if differences in attitude toward equality for women exist between males in various biographical data groupings, such as age, marital status, academic major, and so forth.

Summary

The review of the literature showed that women throughout history have experienced, to varying degrees, differential treatment based on their sex (O'Neill, 1974). Also, it was noted that efforts by women to eliminate that differential treatment have met with much success. While most Americans agree in principle with the concept of equal opportunity and equality of treatment under the law, however, much of the agreement is superficial. When exploring the issue of sexual equality in depth, one finds a residue of deep-rooted sexism which continues to exert pressure on both men and women to restrict themselves to traditional societal roles. For women, these roles have most often centered around homemaker, wife and mother

(Cooper and Cooper, 1974). That this sexism continues to exist is succinctly evidenced by a statement made by a senior male student in an earlier study by Kamarovsky (1973). According to this young man, it is all right for a women to do her "own thing," as long as his wife stays at home.

Many social scientists (Horner, 1972; Chafe, 1977), recognizing that true equality for women will only come by going beyond the laws into the hearts and minds of the people involved, have sought to determine the causes of lingering sexism. What is it that makes the difference between those who support the principles of equality for women and those who oppose them? The answers of many researchers have brought people a step closer to an understanding of the conditions and personality characteristics which contribute to the perpetuation of the status quo.

Miller (1974) and Ausubel (1952), for example, posit that male attitude toward equality for women is a strong function of self-concept. High levels of self-esteem, according to the conclusions drawn from their studies, are positively correlated to the acceptance of principles of equality for women. Where low levels of self-esteem exist, so do negative attitudes towards the women's movement.

An investigation into the concept of self-esteem or self-concept revealed why this might be so. Festinger (1964) and Rogers (1959) found that the self-concept is largely a function of one's social frame

of reference. Once established, it remains fairly stable and resists change. Indeed, according to Coopersmith (1967, p. 21) "it is defended against change." Thus if the social frame of reference within a society changes, as might be accomplished by a shift in women's roles from dependent to independent, social change would also occur and could be interpreted by some as an assault upon the self-concept. Worell and Worell (1971) suggest that those with weak self-concepts would take steps to defend against that assault, while those with stronger self-concepts would not fear this change, but would support a move toward a more equalitarian society. Conversely, those with lower levels of self-esteem would be more defensive against change, and thus would be more likely to oppose equality for women.

Problem and Method

It was the intention of the present study to investigate further the effect of self-concept on attitude toward equality for women. It was hypothesized, for purposes of the study, that there exists no significant degree of correlation between self-concept and attitude toward equality for women. To test the hypothesis, a sample of 808 male students were selected at random from among male students enrolled at Oregon State University during the Winter Term of 1978. Three hundred and seventy-eight (48%) students actually participated

in the study.

The Self-Assurance Scale of the Ghiselli Self-Description Inventory (SDI) (Ghiselli, 1963) and the Women's Liberation Questionnaire (WLQ) (Miller, 1974) were used to obtain measures of self-concept and attitude toward equality for women. The students were asked to respond to the Ghiselli SDI and the WLQ, as well as to a series of biographical items. The biographical data were intended for testing of significant differences in attitude toward equality for women between males in various biographical variable groupings. Data collection took place during the Winter Term of 1978.

Data Analysis

Analysis of the data was performed utilizing three parametric statistical methods. The first, the Pearson "r" correlation technique determined the degree of relationship between male attitude toward equality for women and self-concept. In addition, the one-way analysis of variance (using the F statistic), and the student's "t" statistic, were utilized to determine if significant differences in attitude toward equality for women exist between groups of males divided on the basis of such biographical variables as age, marital status, academic major, political philosophy, and so forth. The Scheffe (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1975) method of multiple comparisons was utilized in conjunction with the F

statistic. The Scheffe method is another technique for showing significance. Finally, although it was not intended as a central focus of the study, one-way analyses of variance and "t" tests were performed to determine if significant differences exist in self-concept between males in all of the biographical data groupings. The F statistic, the Scheffe procedure, and the student's "t" were again utilized to perform this peripheral analysis.

Findings

For purposes of clarity, the findings of the study are presented point by point as determined by the various analyses.

- 1) No significant degree of correlation was found between male self-concept and attitude toward equality for women. The Pearson "r" correlation technique revealed a very slight, but insignificant, negative correlation. A scatter diagram further revealed no degree of relationship between self-concept and attitude.
- 2) It was shown that age is an influencing factor in determining attitude toward equality for women. Older males (over 23 years of age) have significantly more positive attitudes toward equality for women than do younger males (under 19 years of age).
- 3) When comparisons were made between the attitude scores of males in six academic major classifications, it was found that no one category had significantly higher mean values than the others. While

the general statement can be made that the Conventional/Enterprising category (Business) had the lowest attitude, and the Social category (Education, Health and Physical Education, and Home Economics) had the highest, the difference between them was too slight to be interpreted as significant. The results of a McMillan (1972) study are slightly supported by the present research. He reported: "The most notable difference among the various majors seemed to be that business, science and mathematics majors preferred less career involvement for their future wives than did education and humanities majors" (p. 10).

- 4) Males who labeled themselves as liberal in their political orientation scored significantly higher in attitude toward equality for women than did males who thought themselves to be conservative.

 This comparison provided the significant differences of the largest magnitude in mean attitude values between biographical groupings for the entire study.
- 5) Comparisons between males with working mothers and males with non-working mothers produced no evidence of significant differences in mean attitude-toward-equality-for-women values between the two groups. Maternal employment seems to have little or no effect on the attitude of males toward the women's movement. This finding would seem to disagree with Rossi's (1964) report that children of working mothers feel freer than their parents to engage in

overlapping role behaviors, with the result that they achieve in their own lives a greater degree of sex-role equality.

- 6) Hometown size groupings showed no significant differences in attitude-toward-equality-for-women scores. Students with hometown sizes between 5,000 and 10,000 and between 10,000 and 25,000 achieved the highest attitude scores, while students with hometown sizes under 1,000, between 1,000 and 2,500, and between 2,500 and 5,000 scored lowest. In general, it can be said that the smaller the hometown size, the lower the attitude score, but the scores were inconsistent. It should be noted, however, that none of the differences were at the significant level.
- 7) Judging from the results of the "t" test performed to compare attitudes of males with sisters and males with no sisters, there is no significant difference in mean attitude value between the two groups.

 Interesting to this writer was the fact that males with sisters tended to score slightly (but insignificantly) lower in attitude toward equality for women than males with no sisters.
- 8) A significantly different mean attitude value was revealed between males who had no religious background and males who had a strong religious background. Males who claimed a strong religious background scored significantly lower than males who claimed no religious background.
 - 9) Married men tend to have more positive attitudes toward

equality for women than do single males. Analysis of the data revealed a significant difference in mean attitude values between the two groups.

- 10) In general, the attitude toward equality for women held by male students at Oregon State University is fairly positive. The mean score for all respondents was 82.9 (standard error = ± 11.1). In a previous study by Miller (1974), male students at a coeducational state university had achieved a mean score of 65.0 (standard error = ± 7.2) (refer to Appendix E).
- 11) As a whole, based on a median score of 24.2 of a possible 46, male students at Oregon State University can be said to have scored neither very high nor very low on the self-concept test. A previous study by Leonard (1975) revealed a median score of 26 (refer to Appendix F).
- 12) The comparisons made between self-concept and the biographical variable groupings revealed no significant differences between mean self-concept values for males in four age group levels, six academic major classifications, nine hometown size categories, three political philosophy categories, three religious background designations; for males with no sisters and males with sisters, for married males and single males, and for males with working mothers and males with non-working mothers. As a point of interest, males in the Intellectual category of academic major classifications scored

higher in self-concept than did those in the other categories. These same males had also scored high in attitude toward women. Married males scored higher than single males in self-concept, and they had scored significantly higher in attitude as well.

Discussion and Interpretation

In purporting to examine the relationship between male attitude toward equality for women and self-concept of the male sample in this study, the findings reveal that acceptance of principle issues related to the women's rights movement seem to bear no relationship whatsoever to self-concept for male students at Oregon State University. It was found, however, that certain biographical variables have a significant impact on attitude toward the women's movement. A strong religious background and a conservative political philosophy contributed to a significant degree to a negative attitude toward equality for women.

In addition, with regard to age and marital status, older males were significantly more positive in their attitude toward equality than younger males, and married males were more positive than single males. As had been previously pointed out, a study by Miller (1974) indicated that high degrees of self-esteem were positively correlated to positive attitude toward equality for women, and conversely, low levels of self-esteem were correlated to negative attitudes toward

equality. Miller (1974), however, had based his conclusions on a study which involved students from several different types of institutions. He had found his least degree of correlation (indeed, almost no correlation) at a large, coeducational state institution such as Oregon State University. He had found the highest degree of correlation at a small, conservative, religiously affiliated institution. The present study, then, can be said to support to some extent Miller's (1974) study, for it was conducted at a coeducational state university and it revealed that no correlation exists between male attitude toward equality for women and self-concept. It further revealed, as did Miller's (1974) study, that religion and a conservative political philosophy play an important role in determining one's attitude toward the women's movement. It can be concluded then, that self-concept may not be a very important consideration when trying to determine who will have a positive attitude toward women's rights and who will oppose them. Other factors in one's environment, such as religion and politics, which prove in this study to be important determinants of attitude, deserve to be examined more closely.

Age is another variable to consider, and this may be related to how long an individual has been away from the influence of the religious and political orientation of the family. Exposure to the more independent atmosphere of a larger coeducational institution may allow for consideration of more liberal attitudes toward equality for

women. Certainly, in this study, age proved to have significant impact on attitude, but it may be time away from home that is affecting attitude, not age per se.

A further variable to consider is marital status. Married men in this study scored significantly higher in attitude than did single men. It is difficult to say how these same men would have scored when they were single, of course, but one can assume that since the single males scored significantly lower, a marriage relationship with a woman may tend to positively influence attitude toward equality for women.

Perhaps the most important implication from the results is evidence that indicate traditional conceptions of sex-roles are not immutable. If individual attitudes toward sex-roles and equality are subject to variation and change as a function of experience (politics, religion, marriage, age), then societal attitudes are subject to variation and change as well.

A further point to be made is that the enthusiasm and the seriousness with which many students responded, and the nature of their unsolicited comments, speak to a real need for studies of this type. The changing role of women is of concern to today's male student.

Limitations

The concept of self has a long history in psychology and has been studied in a variety of ways. Pervin (1975) has noted that although there is evidence to support the view that self-concept has some stability and can be measured reliably, it presents many assessment hazards. The major problem with most tests of self-concept in use is that one cannot know whether they contain a representative sample of items relevant to the self. Another problem concerns the extent to which subjects are capable of giving and are willing to give honest self reports. Runyon (1977) explains that even among the selftheorists, there is no agreement as to precisely what is meant by self and self-concept. Further, a single total self-esteem score may be misleading when this single score is used to classify students as high or low on self-esteem. Berger (1968) points out that when we speak of self-esteem, we are referring to a construct which consists of a number of relatively independent dimensions, not just one.

In spite of the many conceptual and methodological problems involved in the concept of self, however, it remains an issue of considerable importance. For this reason, and with all the above qualifications in mind, The Ghiselli Self-Description Inventory (Ghiselli, 1963) was selected for this study. An additional constraint

with the Ghiselli SDI was the fact that it was developed to test effectiveness and success in business surroundings, and thus may have biases related to the world of business.

The second instrument in the study, the Women's Liberation Questionnaire (WLQ) (Miller, 1974), provided for coverage of a fairly comprehensive range of issues related to the women's movement. Perhaps the WLQ's weakness is in the language used. One statement, in particular, solicited many student comments. It suggested that women are exploited in our society just as are members of other minority groups. Students were quick to point out that women are not a minority. The two items on day-care and abortion stimulated comments as well. These two issues are difficult to deal with in an entire text, let alone on an "agree-disagree" scale. The last item: "Equality for men and women in salaries, promotion, and hiring" was corrected by many students to read "Equality of opportunity for men and women ... " In spite of these minor limitations, however, the WLQ is a good attitude assessment tool. This writer suggests, however, that further use of it would warrant some revision of the language.

Recommendations

This study hopefully provided insight into the issue of discrimination on the basis of sex. Continuous research into the

conditions and personality characteristics which perpetuate discrimination is necessary if men and women are to learn to live together on an equalitarian basis.

The areas of religion and politics, which have remained staunch in their masculine orientation, need to be carefully studied. These areas, especially religion, are powerful and pervasive forces in many people's daily lives. Their orientation, if not liberalized toward a greater acceptance of equality for women, will continue to shape male and female relationships in an "outmoded" fashion.

Specific recommendations for further study include the following:

- 1) A repetition of the present study substituting female students for male students. Such a study might serve to reinforce some of the findings, and would further investigate the issue of correlation between self-concept and attitude toward equality for women.
- 2) A study to test the correlation between self-concept and attitude toward equality for women along a strongly religious versus no religious background division.
- 3) A study to test the correlation between self-concept and attitude toward equality for women along a liberal versus conservative political philosophy division.

BIBLIOGRAPHY

- Ausubel, D. P. Ego Development and the Personality Disorders.

 New York: Grune and Stanton, 1952.
- Berger, Charles R. Self-Esteem Factor Structure. Journal of Consulting and Clinical Psychology, 32:442-446, 1968.
- Chafe, William H. Women and Equality. New York: Oxford University Press. 1977.
- Cohen, Allan R., Fink, Stephen L., Gadon, Herman, and Willits,
 Robin D. Effective Behavior in Organizations. Arundel,
 Sussex: Richard D. Irwin, Inc., 1976.
- Cooper, James L. and Cooper, Sheila M. The Roots of American Feminist Thought. Boston: Allyn and Bacon, Inc., 1974.
- Coopersmith, S. The Antecedents of Self-Esteem. San Francisco: W. H. Freeman, 1967.
- Courtney, E. Wayne and Sedgwick, Lorry K. Individualized Instruction for Research and Statistics. Corvallis: Oregon State University, 1972.
- Epstein, Cynthia Fuchs. Woman's Place. Berkeley: University of California Press, 1973.
- Festinger, L. A Theory of Social Comparison Processes, Human Relations, 7: 117-140, 1964.
- Friedan, Betty. The Femine Mystique. New York: Dell Publishing Company, 1963.
- Ghiselli, E. E. The Validity of Management Traits Related to Occupational Level. Personnel Psychology, 16: 109-113, 1963.
- Goldberg, P. A. Are Women Prejudiced Against Women? <u>Trans-Action</u>, 20: 28-30, 1968.
- Holland, John L. A Psychological Classification Scheme for Vocations and Major Fields. Journal of Counseling Psychology, 13: 278-288, 1966.

- Horner, Matina. The Motive to Avoid Success and Changing Aspiration of College Women. In J. M. Bardwick, Ed., Readings on the Psychology of Women. New York: Harper and Row, 1972.
- Hage, Jerald and Aiken, Michael. Social Changes in Complex Organizations. New York: Random House, 1970.
- Kamarovsky, Mirra. Cultural Contradictions and Sex Roles. In Joan Huber, Ed., Changing Women in a Changing Society. Chicago: The University of Chicago Press, 1973.
- Korman, Abraham. Self-Esteem as a Moderator of the Relationship Between Self-Perceived Abilities and Vocational Choice.

 Journal of Applied Psychology, 51: 65-67, 1967.
- Leonard, Russell L., Jr. Self-Concept and Attraction for Similar and Dissimilar Others. <u>Journal of Personality and Social</u> Psychology, 31: 926-929, 1975.
- Malec, Michael A. Essential Statistics for Social Research.
 Philadelphia: J. B. Lippincott, 1977.
- Mason, Karen Oppenheim and Czajka, John L. Change in U. S. Women's Sex-Role Attitudes, 1964-1974. American Sociological Review, 41: 573-596, 1976.
- McMillan, Marvin R. Attitude of College Men Toward Career Involvement of Married Women. Vocational Guidance Quarter-1y, 21: 8-11, 1972.
- McMillan, R. R., Cerra, P. F. and Mehaffey, T. D. Opinions on Career Involvement of Married Women. National Association of Women Deans and Counselors Journal, 34: 212-214, 1971.
- Miller, Thomas W. Male Self-Esteem and Attitudes Toward Women's Roles. <u>Journal of College Student Personnel</u>, 14: 402-206, 1974.
- Mintz, Ellen. The Prejudice of Parents. Florence Denmark, Ed.,

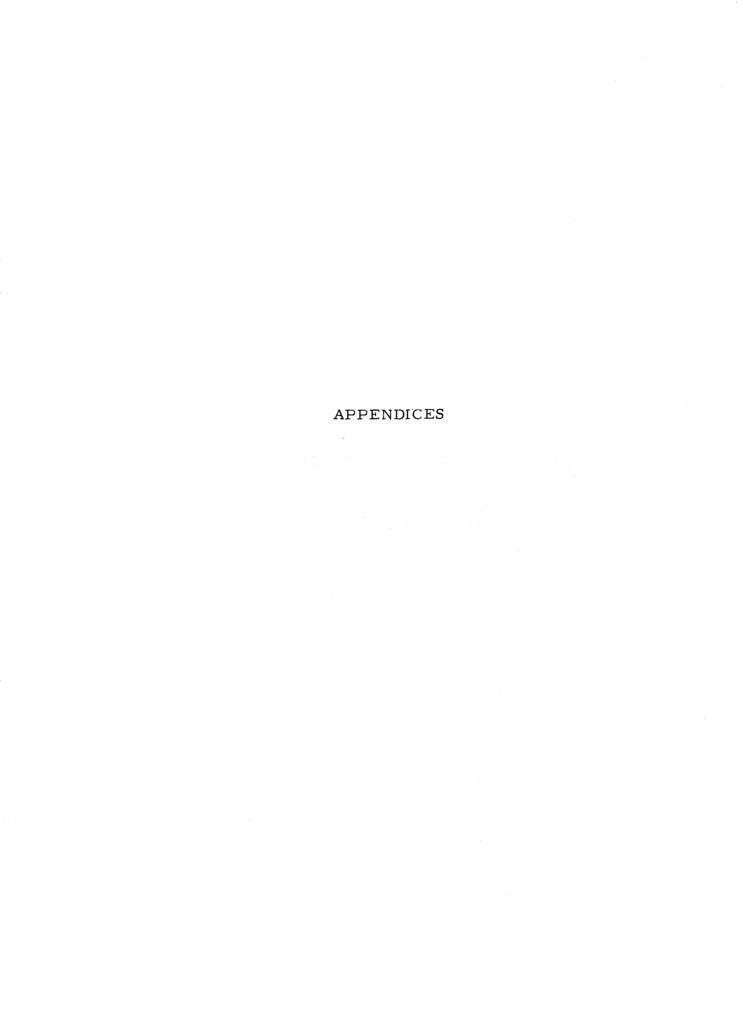
 Who Discriminates Against Women, Beverly Hills, California:

 Sage Publications, Inc., 1974.
- Moffett, Louis A. Sex Differences in Self-Concept. Psychological Reports, 37: 74-78, 1975.

- Moyers, Bill D. "Daddy, Don't be Silly, I'm a Girl!" United States Information Service, 238/06-75/5000, 1975.
- National Commission on the Observance of International Women's Year. --- To Form a More Perfect Union ---. Washington, D. C.: United States Government Printing Office, 1976.
- Nelson, H. Y. and Goldman, P. R. Attitudes of High School Students and Young Adults Toward the Gainful Employment of Married Women. The Family Coordinator, 18: 251-255, 1969.
- Nie, N., Hull, C. H., Jenkins, J. G., Steinbrenner, K. and Bent, D. H. Statistical Package for the Social Sciences. New York: McGraw-Hill Book Company, 1975.
- O'Neill, William L. Everyone Was Brave. New York: Quadrangel/ The New York Times Book Company, 1971.
- Pervin, Lawrence A. Personality Theory, Assessment, and Research. New York: John Wiley and Sons, Inc., 1975.
- Pollock, Mordeca Jane. Changing the Role of Women, The Women's Movement. New York: ANS Press, Inc., 1972.
- Rogers, C. R. A Theory of Therapy, Personality, and Interpersonal Relationships, as Developed in the Client-Center Framework. In S. Koch, Ed., Psychology: A Study of Science. New York: McGraw-Hill, 1959.
- Rokeach, M. Nature of Human Values. London: Free Press, Collier and MacMillan, 1973.
- Rossi, A. S. Equality Between the Sexes: An Immodest Proposal.
 In Robert J. Lifton, Ed., The Woman in America. Boston's
 Beacon Press, 1964.
- Runyon, Kenneth E. Consumer Behavior and the Practice of

 Marketing. Columbus, Ohio: Charles E. Merrill Publishing
 Company, 1977.
- Thomas, William I. Sex and Society. Boston: The Graham Press, 1907.
- Tripp, Maggie. Women in the Year 2000. New York: Arbor House, 1974.

- United States National Commission for UNESCO. Report on Women in America. United States Department of State, Washington, D. C., 1977.
- Van Dusen, Roxann A. and Sheldon, Eleanor. The Changing Status of America's Women. American Psychologist, 31: 106-116, 1976.
- West, Uta. Women in a Changing World. New York: McGraw-Hill Book Company, 1975.
- Worell, J. and Worell, L. Supporters and Opposers of Women's Liberation: Some Personality Correlates. Speech presented at the Seventy-Ninth Annual Convention of the Psychological Association, Washington, D. C., 1971.
- Yankelovich, Daniel. The New Morality. New York: McGraw-Hill Book Company, 1974.



APPENDIX A

HOLLAND'S CLASSIFICATION SCHEME FOR VOCATIONS AND MAJOR FIELDS

PSYCHOLOGICAL CLASSIFICATION SCHEME FOR VOCATIONS AND MAJOR FIELDS

Vocation and Major Field

Realistic Class

Industrial Arts Education Trade & Industrial Education

Forestry

Civil Engineering

Farming

Mechanical Engineering Industrial Engineering

Architecture

Geography

Agricultural Sciences

Intellectual Class

Oceanography Veterinary Science Biochemistry Botany Zoology

Aeronautical Engineering Chemical Engineering Electrical Engineering Engineering, General & Other

Military Science

Geology, Geophysics Astronomy, Astrophysics

Chemistry Physics

Engineering Sciences

Mathematics, Statistics Metallurgical Engineering Medical Technology Other Biological Science Fields

Biology

Natural Science Educ.

Other Health Fields

Medicine

Dentistry Pharmacy Physiology

Physical Therapy Anthropology

Social Class

Physical Educ., Recreation & Health Educ. of Exceptional Children Elementary Educ. Exp. & General Psych. Social Work History Education

Educational Psychology

Education, General & Other

Specialities

Counseling & Guidance

Industrial & Personnel Psychology

Foreign Service

Sociology

General Social Sciences Theology, Religion Clinical Psychology

Conventional Class

Business Education

Accounting

Finance

Enterprising Class

Public Administration

Political Science

Purchasing

Sales

Economics

Other Business & Comm.

Management Marketing

Law

Public Relations

Artistic Class

Literature

Art

Speech

General Humanities

Philosophy

English, Creative Writing

Art Education

Music Education

Music

Drama

English Education

Journalism, Radio-TV,

Communication

Other Fine & Applied Arts

EXPLANATION: In order to conform to the Academic Major Divisions at Oregon State University, it was necessary to combine some of the classes. For this study then, the classes are as follows: Realistic (1), Realistic/ Intellectual (2), Intellectual (3), Social (4), Conventional/Enterprising (6), and Artistic (7). The number 5 was omitted because it was the number given to the Conventional category. No respondents fell into this category.

APPENDIX B

COVER LETTER, FOLLOW-UP POSTCARD AND QUESTIONNAIRE

Dear Student:

A special study to assess current attitudes toward equality for men and women is being conducted at Oregon State University. You have been chosen to participate in this study. This is not a psychological test and it is hoped that you will complete the attached confidential questionnaire. Through your cooperation, we will be able to provide the University with valuable information regarding student attitudes.

No individuals will be identified in this study, and only group comparisons will be made. To insure the confidentiality of your responses, no identifying marks or codes are used in the survey.

It will take only a few minutes of your time to complete the questionnaire. Please answer all questions. It is asked that you return the questionnaire in the pre-addressed envelope by February 24, 1978. The questionnaire may be returned through campus mail, or by dropping it off at the Information Desk at the Memorial Union Business Office (located across from the main lounge in the M.U.).

Your help is very much appreciated. If you have any questions, please feel free to contact me.

Dear Student:

A few days ago you were mailed a questionnaire and a letter requesting your participation in a special study to assess current attitudes toward equality for men and women at Oregon State University. If you have not already completed the questionnaire, I urge you to take a few minutes of your time to do so now. Instructions for returning are printed on the questionnaire. Your help is very much appreciated.

Student Attitude Survey

Please answer the following questions by checking the appropriate responses:

1.	Please check your age group level:
	(1) Under 19 (2) 19-20 (3) 21-23 (4) Over 23
2.	Please identify your academic major according to one of the following:
	(1) Liberal Arts (7) Forestry (2) Science (8) Health and Physical Education (3) Agriculture (9) Home Economics (4) Business (10) Oceanography (5) Education (11) Pharmacy (6) Engineering (12) Veterinary Medicine (13) Other (name)
3.	With which of the following political philosophies do you identify?
	(1) Liberal (2) Middle-of-the-Road (3) Conservative
4.	Please check one of the following categories:
	(1) My mother has never, or almost never, been employed outside the home. (2) My mother has frequently been employed outside the home.
5.	Please indicate the name of your hometown and state:
	Hometown:
6.	Please check one of the following categories:
	(1) I have no sisters. (2) I have 1 or more sisters.
7.	Please identify which of the following statements best applies to you:
	(1) I have a strongly religious background. (2) I have a moderate/slight religious background. (3) I have no religious background.
8.	Please check one of the following:
	(1) single (2) married

Please answer the questions on the back side of this page:

IN EACH OF THE PAIRS OF THE ONE YOU THINK MOS		IN EACH OF THE PAIRS THE ONE YOU THINK LI	OF WORDS BELOW, CHECK EAST DESCRIBES YOU.
1 capable discreet	17 effectionate frank	33 shy lazy	49 careless foolish
2 understanding thorough	18 progressive thrifty	34 unambitious reckless	50 apathetic egotistical
3 cooperative inventive	19 sincere calm	35 noisy arrogant	51 despondent evasive
4 friendly cheerful	20 thoughtful fair-minded	36 emotional headstrong	52 distractable complaining
5 energetic ambitious	21 poised ingenious	37 immature quarrelsome	53 weak selfish
6 persevering independent	22 sociable steady	38 unfriendly self-seeking	54 rude self-centered
7 loyal dependable	23 appreciative good-natured	39 affected moody	55 rattle-brained disorderly
8 determined courageous	24 pleasant modest	40 stubborn cold	56 fussy submissive
9 industrious practical	25 responsible reliable	41 conceited infantile	57 opinionated pessimistic
10 planful resourceful	26 dignified civilized	42 shallow stingy	58 shiftless bitter
11 unaffected alert	27 imaginative self-controlled	43 unstable frivolous	59 hard-hearted self-pitying
12 sharp-witted deliberate	28 conscientious quick	44 defensive touchy	60 cynical aggressive
13 kind jolly	29 logical adaptable	45 tense irritable	61 dissatisfied outspoken
14 efficient clear-thinking	30 sympathetic patient	46 dreamy dependent	62 undependable resentful
15 realistic tactful	31 stable foresighted	47 changeable prudish	63 sly excitable
16 enterprising intelligent	32 honest generous	48 nervous intolerant	64 irresponsible impatient

IN EACH OF THE FOLLOWING STATEMENTS, PLEASE CHECK (\checkmark) THE ONE CHOICE WHICH COMES CLOSEST TO SAYING HOW YOU FEEL ABOUT EACH STATEMENT. THERE ARE NO RIGHT OR WRONG ANSWERS, IT IS VERY IMPORTANT THAT YOU ANSWER EVERY ITEM.

r	A husband and naintain family situation, I wo	y relationships a	to each work half-time with the support of the supp	which reduces the income ort and decision-making v	within the family. V	ith this
	strongly	agree	not sure but _	not sure but	disagree	strongly
-	agree	ug(cc -	probably agree	probably disagree		disagree
2. (because they c	reate a depender	ice and feeling of helples			
٠.	strongly agree	agree _	not sure but probably agree	not sure but probably disagree	disagree	disagree
3.	Children of wo	orking mothers a devoting efforts t	re less well adjusted than o their prime responsibi	n children of non-working lity	g mothers because m	others who
	strongly	agree	not sure but	not sure but	disagree	strongly
	agree	ugi uc _	probably agree	probably disagree		disagree
4.	sex".			ity thus supporting the ic		
	strongly	agree	not sure but	not sure but	disagree	strongly
	agree	ug	probably agree	probably disagree		disagree
	Child-rearing, time job.	while providing	personal satisfaction to I	most women, fails to sati		
	strongly agree		not sure but probably agree	not sure but probably disagree	disagree	strongly disagree
6.	Physical and e pressure wom	emotional make _t en can endure.		mit the type of job and t		
	strongly	, agree	not sure but	not sure but	disagree _	strongly
	agree	ugree .	probably agree	probably disagree		disagree
7.	mothers.			est be accomplished thro		
	strongly	/ agree	not sure but	not sure but	disagree _	strongly
	agree	,	probably agree	probably disagree		disagree
8.	In the world	of work, women	are generally less reliabl	e than are men.		
	strongly	v agree	not sure but	not sure but	disagree _	strongly
	agree		probably agree	probably disagree		disagree
9.	When a man a	and a woman are ition because he	found to have identical is viewed as the tradition	credentials for hiring or nal breadwinner.		
	strongl	v agree	not sure but	not sure but	disagree _	strongly
	agree		probably agree	probably disagree		disagree
10,	When the ma	ss media (motio	n picture, newspapers, ra with such efforts.	ndio, television) tend to t	reat women primaril	y as sex
	strongl	y agree	not sure but	not sure but	disagree _	strongly
	agree	, 49.25	probably agree	probably disagree		disagree

11.	soluti	ons to their owi	n personal pro	oblems.		frustrated women w				
		strongly	agree	not sure but probably agree		not sure but probably disagree		disagree	9	trongly disagree
12.						d of work, and in so				
	·	strongly	agree	not sure but probably agree		not sure but probably disagree		disagree	9	strongly disagree
13.		a husband and inate.	wife are willi	ng to share househo	old tas	ks, it suggests that th	ne husb	and is pas	sive and	j
	-	strongly	agree	- not sure but probably agree		not sure but probably disagree		disagree	. (strongly disagree
14.	Wom	en are exploited	, just as mem	bers of other mino	rity gr	oups are exploited in	our so	ociety.		
	•	strongly	agree	- not sure but probably agree	· —	not sure but probably disagree		disagree		strongly disagree
15.	Shou	ld the women's	right movem	ent achieve equality	for w	omen, I feel my life	would	be change	ed.	
		strongly	agree	 not sure but probably agree 		not sure but probably disagree		disagree		strongly disagree
16.	The \	Nomen's Libera	tion moveme	nt will not affect th	e attit	udes and values of n	nen in d	our society	y .	
		strongly	agree	not sure but probably agree	· · ·	not sure but probably disagree		disagree		strongly disagree
17.		ijor concern rela tractive to me.	ited to wome	n's right and humar	n equa	lity is that a woman	who is	truly equ	al would	d be
		strongly	agree	 not sure but probably agree 		not sure but probably disagree		disagree		strongly disagree
но	w do	YOU FEEL A	BOUT THE F	OLLOWING?						
18.	Publi	ic day-care facil	ities for moth	ers who wish to wo	ork.					
		strongly	_ agree	 not sure but probably agree 		not sure but probably disagree		disagree		strongly disagree
19.	Wom	nen should be at	le to obtain a	abortion on demand	d.					
	-	strongly	_ agree	 not sure but probably agree 		not sure but probably disagree		disagree		strongly disagree
20.	Equa	ality for men an	d women in s	alaries, promotion,	and h	iring.				
		strongly	agree —	 not sure but probably agree 		not sure but probably disagree		disagree		strongly disagree

Please place the completed questionnaire in the pre-addressed envelope (Yvonne Lewis, Student Services) and return it through <u>campus mail</u> or drop it off at the <u>Information Desk</u> in the Memorial Union Business Office (located across from the main lounge in the M.U.).

APPENDIX C

SUMMARY OF TESTS OF SIGNIFICANCE WITH SELF-CONCEPT AS VARIABLE

EFFECT OF RELIGIOUS BACKGROUND ON SELF-CONCEPT ANALYSIS OF VARIANCE $^{\rm l}$

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	+ · • •
Between groups Within groups	2 374	10.9261 9634.7025	5.4631 25.7612	.2121	•
Total	376	9645.6286	-5.1012		

Group	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	95 Percent Confidence Interval for Mean
Strong Background Moderate/Slight	101	23.9109	4.9256	.4901	7.0000	36.0000	22.9385 to 24.8833
Background	222	24.3063	5.0245	. 3372	12.0000	38.0000	23.6417 to 24.9709
No Background	54	24.2222	5.5446	. 7545	14.0000	38.0000	22.7088 to 25.7356
Total	377	24.1883			7.0000	38.0000	
	Ungro	ouped Data	5.0649	.2609			23.6754 to 24.7012

¹ H_o: $\mu_1 = \mu_2 = \mu_3$

* p < .8090

Critical $\alpha = .05$

EFFECT OF RELIGIOUS BACKGROUND ON SELF-CONCEPT SCHEFFE PROCEDURE $^{\mathrm{l}}$

Subset Number	Group		
Subset 1 Religious Back- ground Group	Strong Background	No Background	Moderate/Slight Background
Mean	23.9109	24.2222	24.3063

Range for the .05 level = 3.48 (tabular value)

$$\mu_{j} - \mu_{i} = 3.5890 \cdot \text{Range} \cdot \frac{1}{n_{i}} + \frac{1}{n_{j}}$$

EFFECT OF HOMETOWN SIZE ON SELF-CONCEPT ANALYSIS OF VARIANCE $^{\rm l}$

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	
Between groups Within groups	8 367	128,6889 9513,5557	16.0861 25.9225	. 62 05*	
Total	375	9642.2447			

Group	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	95 Percent Confidence Interval for Mean
Over 100,000	83	23.7590	4.8454	. 5319	13,0000	36,0000	22, 7010 to 24, 8171
50,000-100,000	44	24.9545	5,5613	.8384	14.0000	37.0000	23, 2638 to 26, 6453
25,000-50,000	55	24.9455	5.3035	.7151	14.0000	34.0000	23,5117 to 26,3792
10,000-25,000	71	24,0000	5.3878	.6394	12.0000	38.0000	22,7247 to 25,2753
5,000-10,000	30	23,2000	5,0337	.9190	7.0000	32,0000	21.3204 to 25.0796
2,500- 5,000	22	24.8636	5,7263	1.2208	15.0000	38,0000	22,3248 to 27,4025
1,000-2,500	30	24,0333	4.3508	. 7944	13,0000	33,0000	22,4087 to 25,6580
Under 1,000	28	23,5357	3,9109	.7391	15.0000	30,0000	22,0192 to 25,0522
Foreign	13	23.7692	5.1826	1.4374	16.0000	32,0000	20.6374 to 26.9010
Total	376	24.1436			7.0000	38.0000	
	Ungro	uped Data	5.0703	.2613			23.6294 to 24.6578

¹ H_o: $\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 = \mu_6 = \mu_7 = \mu_8 \neq \mu_9$ * p < .7606 Critical $\alpha = .05$

EFFECT OF HOMETOWN SIZE ON SELF-CONCEPT SCHEFFE PROCEDURE $^{\rm l}$

Subset Number	Gro	up							
Subset 1									
Hometown Size Group	5,000-10,000	Under 1,000	Ove <u>r 100,000</u>	Foreign	10,000-25,000	1,000-2,500	2 ,500-5,000	25,000-50,000	50,000-100,000
Group Mean	23,2000	23.5357	2 3.7590	23. 7692	24,0000	24,0333	24.8636	2 4. 9455	24.9545

Range for the .05 level = 5.61 (tabular value);

$$\mu_j = \mu_i = 3.6002 \cdot \text{Range} \cdot \frac{1}{n_i} + \frac{1}{n_j}$$

$\begin{array}{c} \mathtt{EFFECT} \ \mathtt{OF} \ \mathtt{POLITICAL} \ \mathtt{PHILOSOPHY} \ \mathtt{ON} \ \mathtt{SELF-CONCEPT} \\ \mathtt{ANALYSIS} \ \mathtt{OF} \ \mathtt{VARIANCE}^{\, l} \end{array}$

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio_	
Between groups Within groups	2 363	89.8817 9007.5746	44.9408 24.8143	1.8111*	• * *
Total	365	9097.4563			

Group	Count	Me an	Standard Deviation	Standard Error	Minimum	Maximum	95 Percent Confidence Interval for Mean
Liberal	103	23.3883	4.8330	. 4762	14.0000	38.0000	22.4438 to 24.3329
Middle-of-the							
Road	200	24.4600	5.1606	.3649	12.0000	38.0000	23.7404 to 25.1796
Conservative	63	24.5714	4.6236	.5825	15.0000	38.0000	23.4070 to 25.7359
Total	366	24.1776			12.0000	38.0000	
	Ungr	ouped Data	4.9924	.2610			23.6644 to 24.6908

¹ H_o: $\mu_1 = \mu_2 = \mu_3$

* p 🚄 .1649

Critical $\alpha = .05$

EFFECT OF POLITICAL PHILOSOPHY ON SELF-CONCEPT SCHEFFE PROCEDURE $^{\mathrm{l}}$

Subset Number	Group		
Political Philosophy Group	Liberal	Middle-of-the-Road	Conservative
Mean	23.3883	24.4600	24.5714

Ranges for the .05 level = 3.48 (tabular value)

$$\mu_j - \mu_i = 3.5224 \cdot \text{Range} \cdot \frac{1}{n_i} + \frac{1}{n_j}$$

EFFECT OF ACADEMIC MAJOR ON SELF-CONCEPT ANALYSIS OF VARIANCE $^{\rm I}$

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	
Between groups Within groups	5 372	258.0298 9439.1342	51.6060 25.3740	2.0338*	
Total	377	9697.1640			

Group	Count	Mean	Standard Deviation	Standard Error	Minimum	Maximum	95 Percent Confidence Interval for Mean
Realistic	72	23.0694	4.4889	.5290	13.0000	33.0000	22.0146 to 24.1243
Realistic/Intellectual	93	24.6559	5.0787	.5266	14.0000	38.0000	23.6100 to 25.7019
Intellectual	94	25.0851	5.2048	.5368	12.0000	38.0000	24.0191 to 26.1511
Social	22	22.4091	4.2500	.9061	15.0000	30.0000	20.5247 to 24.2934
Conventional/Enterprising	62	24.0484	5.2148	.6623	7.0000	37.0000	22.7241 to 25.3727
Artistic	35	24.0000	5.6308	.9518	13,0000	33,0000	22.0658 to 25.9342
Total	378	24.1693			7.0000	38.0000	e e
	Ungro	uped Data	5.0717	.2609			23.6564 to 24.6822

¹ H₂:
$$\mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 = \mu_6$$

* p < .0732

Critical $\alpha = .05$

EFFECT OF ACADEMIC MAJOR ON SELF-CONCEPT SCHEFFE PROCEDURE $^{\hat{\mathbf{l}}}$

Subset Number	C	Froup	_			
Subset 1						
Academic Major				Conventional/	Realistic/	
Group	Social	Realistic	Artistic	Enterprising	Intelle ctúal	Intellectual
Mean	22.4091	23.0694	24.0000	24.0484	24.6559	25.0851

Range for the .05 level = 4.73 (tabular value);

$$\mu_j - \mu_i = 3.5619 \cdot \text{Range} \cdot \frac{1}{n_i} + \frac{1}{n_j}$$

EFFECT OF AGE ON SELF-CONCEPT ANALYSIS OF VARIANCE $^{\rm l}$

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	· · · · · · · · · · · · · · · · · · ·
Between groups	3	120.9997	40.3332	1.5752	
Within groups	374	9576.1643	25.6047		
Total	377	9697.1640			

Age Group	Count	Me an	Standard Deviation	Standard Error	Minimum	Maximum	95 Percent Confidence Interval for Mean
Under 19	39	24.5128	5.2609	. 8424	14.0000	36.0000	22.8074 to 26.2182
19-20	117	24.7607	5.2105	.4817	13.0000	38.0000	23.8066 to 25.7148
21-23	120	23.3833	4.9130	. 4485	7.0000	34.0000	22.4953 to 24.2714
Over 23	102	24.2843	4.9779	. 4929	15.0000	38.0000	23.3066 to 25.2621
Total	378	24. 1693			7.0000	38.0000	
	Ungr	ouped Data	5.0717	.2609		* * * * * * * * * * * * * * * * * * * *	23.6564 to 24.6822

¹ H_o: $\mu_1 = \mu_2 = \mu_3 = \mu_4$ * p .1949 Critical $\alpha = .05$

EFFECT OF AGE ON SELF-CONCEPT SCHEFFE PROCEDURE $^{\mathrm{l}}$

Subset Number	Group		-	
Subset 1				
Age Group	21-23	Over 23	Under 19	19-20
Mean	23.3833	24.2843	24.5128	24.7607

 1 Ranges for the .05 level = 3.97 (tabular values)

$$\mu_{j} - \mu_{i} = 3.5780 \cdot \text{Range} \cdot \frac{1}{n_{i}} + \frac{1}{n_{j}}$$

effect of maternal employment on self-concept student's " \mathbf{t} " test 1

				Pooled Variance Estimate ²			
Count	Mean	Standard Deviation	Standard Error	T Value	Degrees of Freedom	2-Tailed Probability	
149	24.6644	5,273	. 432		275	124	
228 23.8640		4.925	. 326	1,50	315	. 134	
	149	149 24.6644	149 24,6644 5,273	149 24,6644 5,273 ,432	149 24.6644 5.273 .432 1.50	149 24.6644 5.273 .432 1.50 375	

$\begin{array}{c} \mathtt{EFFECT} \ \, \mathtt{OF} \ \, \mathtt{SISTERS} \ \, \mathtt{ON} \ \, \mathtt{SELF\text{-}CONCEPT} \\ \mathbf{STUDENT'S} \ \, \mathtt{''t''} \ \, \mathtt{TEST}^1 \end{array}$

					Pooled Variance Estimate ²			
Group		Standard Deviation	Standard Error	T Value	Degrees of Freedom	2-Tailed Probability		
No Sisters	90	24.2667	4.398	.464		27/	025	
l or More Sisters	288	24.1389	5.271	.311	.21	376	.835	
¹ H _o : μ ₁ = μ ₂								
Critical $\alpha = .05$								
² For H _o : $\sigma_1^2 = \sigma_2^2$, t	he 2-tailed	prob ability v	vas 0.911					

EFFECT OF MARITAL STATUS ON SELF-CONCEPT STUDENT'S "t" TEST $^{\rm l}$

		•			Pooled	Variance Esti	mate ²
Group	Count	Mean	Standard Deviation	Standard Error	T Value	Degrees of Freedom	2-Tailed Probability
Single	322	23,9783	5,092	.284			
Married	56	25,2679	4.852	.648	-1.76	376	. 079

 $^{^{1}}_{0}$: $\mu_{1} = \mu_{2}$

Critical $\alpha = .05$

² For H : $\sigma_1^2 = \sigma_2^2$, the 2-tailed probability was .680

APPENDIX D SUMMARY OF BIOGRAPHIC INFORMATION

Summary of Biographic Information

Age

Years	Percent	Number
Under 19	10	39
19-20	31	117
21-23	32	120
Over 23	27	102
Totals	100	378

Political Philosophy

Philosophy	Percent	Number
Liberal	28	103
Middle-of-the-Road	55	200
Conservative	17	63
Totals	100	366
V .		

Maternal Employment

Maternal Employment (outside of home)	Percent	Number	
Mother never/almost never worked	40	149	
Mother frequently worked	60	228	
Totals	100	377	

Hometown Size

Size	Percent	Numbe r_	
Over 100,000	22	83	
50,000-100,000	12	44	
25,000-50,000	15	55	
10,000-25,000	19	71	
5,000-10,000	8	30	
2,500- 5,000	6 .	22	
1,000- 2,500	8	30	
Under 1,000	7	28	
Foreign	3	13	
Totals	100	376	

Sisters

Percent	Number	
24	90	
76	288	
100	378	
	24 76	

Religious Background

Background	Percent Num			
Strong	2.7	101		
Moderate/Slight	59	222		
None	14	54		
Totals	100	377		

Marital Status

Status	Percent	Number
Single Married	85 15	3 22 56
Totals	100	378

Academic Major Classification

	Percent	Percent University	
Classification	Sample	Population	Number
Realistic (Forestry, Agriculture)	19	19	72
Realistic /Intellectual (Engineering)	25	25	93
Intellectual (Science, Pharmacy,	25	20	94
Geology, Oceanography,			
Veterinary Medicine, Pre-Medi-			
cine, Pre-Dentistry, Wildlife			
Science, Food Science)			
Social (Education, Health & Physical	6	5	22
Education, Home Economics)			
Conventional/Enterprising (Business)	16	18	62
Artistic (Liberal Arts)	9	10	35
Totals	100		378

APPENDIX E

FREQUENCY DISTRIBUTION TABLE FOR ATTITUDE-TOWARD-EQUALITY-FOR-WOMEN SCORES

Frequency Distributions of Attitude-Toward-Equality-for-Women Scores

Attitude Score	Absolute Frequency	Relative Frequency	Adjuste Freque		Cumulative Frequency
36	1	. 3	.3		. 3
42	1	.3	. 3		5
53	2	• 5	.5		1.1
54	1	. 3	. 3		1.3
56	1	. 3	. 3		1.6
57	1	. 3	. 3		1.9
58	1	. 3	.3		2.1
59	1	.3	.3		2.4
60	2	.5	.5		2.9
	2				
61		. 5	.5		3.4
62	1	. 3	. 3		3.7
63	2	. 5	. 5		4.2
64	1	.3	. 3		4.5
65	5	1.3	1.3		5.8
66	4	1, 1	1.1		6.9
67	4	1.1	1.1		7.9
68	7	1.9	1.9		9.8
69	7	1.9	1.9		11.6
70	4	1.1	1.1		12.7
70 71	6		1.1		
		1.6	-		14.3
72	4	1, 1	1, 1		15.3
73	5	1,3	1.3		16.7
74	10	2.5	2.6		19.3
75	12	3 .2	3.2		22.5
76	8	2.1	2.1		24.6
7.7	11	2.9	2.9		27.5
78	12	3.2	3.2		30.7
79	14	3.7	3.7		34.4
80	18	4.8	4.8		39.2
81	10				
		2.6	2.6		41.8
82	22	5.8	5.8		47.6
83	15	4.0	4.0		51.6
84	20	5.3	5.3		56.9
85	14	3.7	3.7		60.6
86	15	4.0	4.0		64.6
87	15	4.0	4.0		68.5
88	7	1.9	1.9		70.4
89	11	2.9	2.9		73.3
90	12	3.2	3.2		76.5
91	14	3.7	3.7		80.2
9 2					
	8	2.1	2.1		82.3
93	8	2.1	2.1		84.4
94	10	2.6	2.6		87.0
95	6	1.6	1.6		88.6
96	7	1.9	1.9		90.5
97	3	.8	.8		91.3
98	2	.5	. 5		91.8
99	4	1.1	1.1		92.9
100	8	2.1	2.1		95.0
101	2		.5		95.5
		.5			
102	4	1.1	1.1		96.6
103	1	.3	.3		96.8
104	2	• 5	. 5		97.4
106	2	.5	. 5		97.9
107	3	. 8	. 8		98.7
109	2	.5	.5		99.2
110	2	.5	. 5		99.7
114	1	. 3	. 3		100.0
Total	378	100.0	100,0		
Mean	82.905	Standard error	.572	Median	83.10
Me an Mode					123.77
	82,000	Standard deviation	11, 125	Variance	
Kurtosis	1.057	Skewness	32 1	Range	78.00
Minimum	36.000	Maximum	110.000	Sum	31338.00
Coefficient of Variation	13.419	.95 Confidence Interval	81.780	to	84.03

APPENDIX F

FREQUENCY DISTRIBUTION TABLES FOR SELF-CONCEPT SCORES

Frequency Distributions of Self-Concept Scores

Self-Concept Score	Absolute Frequency	Relative Frequency	Adjusted Frequency	Cumulative Frequency
7	1	. 3	. 3	. 3
12	- 1	. 3	. 3	• 5
13	- 3	. 8	. 8	1.3
14	5	1.3	1.3	2.6
15	. 8	2.1	2.1	4.8
16	5	1.3	1.3	6.1
17	14	3.7	3.7	9.8
18	13	3.4	3.4	13.2
19	15	4.0	4.0	17.2
20	29	7.7	7.7	24.9
21	18	4.8	4.8	29.6
22	30	7.9	7.9	37.6
 23	2.6	6.9	6.9	44.4
24	29	7.7	7.7	52.1
2.5	32	8.5	8.5	60.6
26	28	7.4	7.4	68.0
27	23	6.1	6.1	74.1
28	2.6	6.9	6.9	81.0
29	19	5.0	5.0	86.0
30	15	4.0	4.0	89.9
31	7	1.9	1.9	91.8
32 32	11	2.9	2.9	94.7
33	⁻ ,9	2.4	2.4	97.1
34	2	. 5	. 5	97.6
35	4	1.1	. 1. 1	98.7
36	· 1	. 3	. 3	98.9
37	1	. 3	. 3	99.2
38	3	. 8	, ; . 8	100.0
Total	378	100.0	100.0	
				24.004
Mean		Standard error	.261	Median 24.224
Mode		Standard deviat		Variance 25.722
Kurtosis	<u> </u>	Skewness	.024	Range 31.000
Coefficient of Variation	20.984	95 Confidence Interval	23.656	to 24.682 Sum 9136.000
Minimum	7.000	Maximum	38.000	