



Attitude and behavioral change in academic advisors at Montana State University : sex role stereotyping and sexual bias in vocational choice
by Judith Ann Wiseman

A thesis submitted in partial fulfillment of the requirements for the degree of DOCTOR OF EDUCATION
Montana State University
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Abstract:

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Three administrations of the Attitude Toward Women Scale, sixty-two (62) completed forms of the experimental instrument. Advisor-Student Rating Scale and participant workshop evaluations were used to assess change.

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Significant differences occurred between male and female subjects with females significantly more liberal on Factor II, Freedom and Independence, Factor III, Dating, Courtship and Etiquette, and Factor V, Sexual Behavior.

Two items emerged as noticeable differences between the experimental and control group on the Advisor-Student Rating Scale. Item 20: "The faculty member allowed interruptions to take place during the interview, for example, incoming calls and people stopping by." Students indicated sixteen (16) of the experimental group and eight (8) of the control conducted the interview in this manner. Item 32: "The faculty member suggested possibilities for advanced degrees in the areas of my interest." Students indicated twenty-three (23) of the experimental group and sixteen (16) of the control offered such suggestions.

Workshop evaluations completed by participants indicated overall positive reactions to the training utilized in this investigation.

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MONTANA STATE UNIVERSITY: SEX ROLE STEREOTYPING
AND SEXUAL BIAS IN VOCATIONAL CHOICE

by

JUDITH ANN WISEMAN

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Approved:

Earl N. Ringo
Chairperson, Graduate Committee

Eric Strohschneider
Head, Major Department

Henry L. Parsons
Graduate Dean

MONTANA STATE UNIVERSITY
Bozeman, Montana

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TABLE OF CONTENTS

CHAPTER		PAGE
	Vita	ii
	Acknowledgements	iii
	Table of Contents.	iv
	List of Tables	vi
	Abstract	xi
1	INTRODUCTION	1
	Need for the Study	2
	Statement of the Problem	7
	General Procedures	8
	Limitations of the Study	9
	Definition of Terms.	9
	Summary.	10
2	REVIEW OF THE LITERATURE	11
	Introduction	11
	Women and Work	11
	Women and Education.	20
	Socialization.	24
	Implications of Socialization.	32
	Women Students in Higher Education	44
	Research: Attitudes Toward Sex Roles.	52
	Summary.	67
3	PROCEDURES	68
	Introduction	68
	Population Description and Sampling Procedure.	69
	Investigation and Treatment Procedure.	70
	Design, Format and Content of Workshops.	72
	Method of Collecting Data.	74
	Instrumentation.	78
	Method of Organizing Data.	84
	Statistical Hypothesis.	84
	Analysis of Data	88
	Summary of Chapter	89
4	ANALYSIS AND DISCUSSION.	90
	Experimental and Control	98
	Age.	112
	Male and Female	123
	Advisor-Student Rating Scale	137

CHAPTER		PAGE
	Workshop Evaluation Summary.	149
	Summary.	153
5	SUMMARY.	155
	Conclusions.	160
	Recommendations.	161
	BIBLIOGRAPHY	163
	APPENDICES	177
	Appendix A	178
	Appendix B	181
	Appendix C	184
	Appendix D	188
	Appendix E	189
	Appendix F	193
	Appendix G	206
	Appendix H	207
	Appendix I	208
	Appendix J	209
	Appendix K	210
	Appendix L	211
	Appendix M	218
	Appendix N	220
	Appendix O	222
	Appendix P	232
	Appendix Q	243
	Appendix R	247
	Appendix S	266
	Appendix T	272
	Appendix U	273
	Appendix V	274
	Appendix W	275
	Appendix X	276
	Appendix Y	277

LIST OF TABLES

TABLE		PAGE
1	Participant Population	90
2	Analysis of Covariance between Experimental and Control on the Second Testing of All Factors with the Pre-test as the Covariate.	93
3	Analysis of Covariance between Experimental and Control on the Third Testing of All Factors with Pre-test as the Covariate.	94
4	Analysis of Covariance Among the Three Age Groups on the Second Testing of All Factors with Pre-test as the Covariate	95
5	Analysis of Covariance among the Three Age Groups on the Third Testing of All Factors with Pre-test as the Covariate	95
6	Analysis of Covariance Between Male and Female on the Second Testing of All Factors with Pre-test as the Covariate	96
7	Analysis of Covariance between Male and Female on the Third Testing of All Factors with Pre-test as the Covariate	97
8	Analysis of Covariance Between Experimental and Control Groups on the Second Testing of Factor I, Vocational, Educational and Intellectual Roles, with Pre-test as the Covariate	98
9	Analysis of Covariance Between Experimental and Control on the Third Testing of Factor I, Vocational, Educational and Intellectual Roles with Pre-test as the Covariate	99
10	Analysis of Covariance Between Experimental and Control on the Second Testing of Factor II, Freedom and Independence, with Pre-test as the Covariate.	100

TABLE		PAGE
11	Analysis of Covariance Between Experimental and Control on the Third Testing of Factor II, Freedom and Independence, with Pre-test as the Covariate.	100
12	Analysis of Covariance Between Experimental and Control on the Second Testing of Factor III, Dating, Courtship and Etiquette, with Pre-test as the Covariate	101
13	Analysis of Covariance Between Experimental and Control on the Third Testing of Factor III, Dating Courtship and Etiquette with Pre-test as the Covariate.	102
14	Analysis of Covariance Between Experimental and Control on the Second Testing of Factor IV, Drinking, Swearing and Dirty Jokes, with Pre-test as the Covariate	103
15	Analysis of Covariance Between Experimental and Control on the Third Testing of Factor IV, Drinking, Swearing and Dirty Jokes, with Pre-test as the Covariate	103
16	Analysis of Covariance Between Experimental and Control on the Second Testing of Factor V, Sexual Behavior, with Pre-test as the Covariate	104
17	Analysis of Covariance Between Experimental and Control on the Third Testing of Factor V, Sexual Behavior, with Pre-test as the Covariate	105
18	Analysis of Covariance Between Experimental and Control on the Second Testing of Factor VI, Marital Relationships and Obligations, with the Pre-test as the Covariate.	106
19	Analysis of Covariance Between Experimental and Control on the Third Testing of Factor VI, Marital Relationships and Obligations, with Pre-test as the Covariate.	107

TABLE		PAGE
20	Analysis of Covariance Among Three Age Groups on the Second Testing of Factor, I, Vocational, Educational, and Intellectual Roles, with the Pre-test as the Covariate.	112
21	Analysis of Covariance Among Three Age Groups on Third Testing of Factor I, Vocational, Educational and Intellectual Roles, with the Pre-test as the Covariate.	113
22	Analysis of Covariance Among Three Age Groups on Second Testing of Factor II, Freedom and Independence, with the Pre-test as the Covariate . . .	114
23	Analysis of Covariance Among Three Age Groups on Third Testing of Factor II, Freedom and Independence, with the Pre-test as the Covariate . . .	114
24	Analysis of Covariance Among Three Age Groups on Second Testing of Factor III, Dating, Courtship and Etiquette, with the pre-test as the Covariate.	115
25	Analysis of Covariance Among Three Age Groups on Third Testing of Factor III, Dating, Courtship and Etiquette, with the Pre-test as the Covariate.	116
26	Analysis of Covariance Among Three Age Groups on Second Testing of Factor IV, Drinking, Swearing and Dirty Jokes, with the Pre-test as the Covariate.	117
27	Analysis of Covariance Among Three Age Groups on Third Testing of Factor IV, Drinking, Swearing and Dirty Jokes, with the Pre-test as the Covariate.	117
28	Analysis of Covariance Among Three Age Groups on Second Testing of Factor V, Sexual Behavior, with the Pre-test as the Covariate.	118

TABLE		PAGE
29	Analysis of Covariance Among Three Age Groups on Third Testing of Factor V, Sexual Behavior, with the Pre-test as the Covariate	119
30	Analysis of Covariance Among Three Age Groups on Second Testing of Factor VI, Marital Relationships and Obligations with the Pre-test as the Covariate .	120
31	Analysis of Covariance Among Three Age Groups on Third Testing of Factor VI, Marital Relationships and Obligations with the Pre-test as the Covariate .	121
32	Analysis of Covariance Between Male and Female on the Second Testing of Factor I, Vocational, Educational, and Intellectual Roles, with the Pre-test as the Covariate	123
33	Analysis of Covariance Between Male and Female on the Third Testing of Factor I, Vocational, Educational, and Intellectual Roles, with the Pre-test as the Covariate	124
34	Analysis of Covariance Between Male and Female on the Second Testing of Factor II, Freedom and Independence, with the Pre-test as the Covariate . .	125
35	Analysis of Covariance Between Male and Female on the Third Testing of Factor II, Freedom and Independence, with the Pre-test as the Covariate . .	125
36	Analysis of Covariance Between Male and Female on the Second Testing of Factor III, Dating, Courtship and Etiquette, with the Pre-test as the Covariate.	126
37	Analysis of Covariance Between the Male and Female on the Third Testing of Factor III, Dating, Courtship and Etiquette with the Pre-test as the Covariate.	127

TABLE		PAGE
38	Analysis of Covariance Between Male and Female on the Second Testing of Factor IV, Drinking, Swearing and Dirty Jokes, with the Pre-test as the Covariate.	128
39	Analysis of Covariance Between Male and Female on the Third Testing of Factor IV, Drinking, Swearing and Dirty Jokes, with the Pre-test as the Covariate.	129
40	Analysis of Covariance Between Male and Female on the Second Testing of Factor V, Sexual Behavior, with the Pre-test as the Covariate	130
41	Analysis of Covariance Between Male and Female on the Third Testing of Factor V, Sexual Behavior, with the Pre-test as the Covariate	130
42	Analysis of Covariance Between the Male and Female on the Second Testing of Factor VI, Marital Relation- ships and Obligations with the Pre-test as the Covariate.	132
43	Analysis of Covariance Between Male and Female on the Third Testing of Factor VI, Marital Relation- ships and Obligations with the Pre-test as the Covariate.	132
44	Advisor-Student Rating Scale Summary	138

ABSTRACT

Disparity in areas of employment, earnings and education between the sexes indicate need for reduction of sexual bias and sex role stereotyping in this society as a whole. Education may be instrumental in providing the necessary impetus for change. Administrators and faculty in higher education can provide enlightened guidance to students as they plan life goals and make occupational choices; if, of course, they themselves are informed.

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Chapter 1

INTRODUCTION

Culture forms the framework of our lives. We act, react, think and feel in ways often dictated by our past and the past of others. Although we maintain control over our lives, our environment and history tends to control our control. Our destinies are largely created before our existence.

One of the foremost predictors of an individual's future occurs at conception. The sex of a human being can channel that life into a predetermined set of life happenings. Part of this is due to biology but much more to the society in which the individual must live. Gender is assigned at birth and a proper set of attitudes and behaviors are then expected and generally adopted.

Until very recently, no argument was made of the roles prescribed to males and females. No doubt frustrations and dissatisfaction existed but it was the individual's failure to adapt, not the system that was blamed.

Betty Friedan in a monumental book of social discovery The Feminine Mystique laid open this portion of our culture for scrutiny and began a movement for change often referred to as "Women's Liberation." In her revealing book, the role of woman was questioned. Once the door was opened, a flood of questions were asked--questions requiring answers and answers producing new questions.

It is possible for society to benefit from this new knowledge; the discarding of disfunctional mores and the realignment of priorities has the potential of revitalizing the social structure. Although the process is often painful and disruptive, it is believed by many that the benefits far out-number the disadvantages.

Education can help society change more quickly and with less stress. Understanding the problem, discerning what is needed, what are the best ways in accomplishing set goals and implementing an appropriate plan, are all areas in which the educators can play a significant role.

NEED FOR THE STUDY

Montana State University (M.S.U.) is much like other institutions of higher education regarding its movement toward liberalization of attitudes toward sexual roles and the elimination of sex bias inequities. Some progress has been made but much is left to be accomplished.

A recent judgement on a classification sex discrimination case against Montana State University was handed down from the U. S. District Court in Butte, Montana calling for a total settlement of \$45,619 in back pay, legal fees, expenses and benefits to female faculty members at M.S.U. This illustrates that problems do exist and that some solutions have been sought to correct the inequities.

Cases of this kind point clearly to one area of need on a campus - that of establishing equality in pay and status of employees. It is widely accepted that sexual bias and sex role stereotyping also exists in other areas of the campus community but it often is much more difficult to identify and correct.

Students, both male and female, suffer from the consequences of sexual bias as they set goals and pursue their educational interests. Women students are found to be particularly vulnerable to such attitudes in regard to the roles they are expected to play and in the ways in which they are perceived and treated by others.

Astin (1976) suggests that women students face special problems for which special solutions may be required. An institutional failure to accommodate to women's needs may result in lower educational attainment. In light of the data presented which indicates women students do fail to receive degrees more often than male students, it appears that unmet needs do exist. Astin believes that because of low percentages of women on college faculties, women students are less likely to have role models to follow. Instead they turn to male faculty who often do not give them the support and encouragement they need. She indicates also that evidence exists that (1) male faculty tend to look down on their women colleagues and (2) that this hostility or indifference is perceived by women students.

Women students being unable to see themselves in careers due to

few role models and feeling as if they are not being taken seriously, many times become discouraged and drop out of school. According to Astin, the lack of faculty acceptance and encouragement has especially adverse effects on women graduate students. They need the support of a mentor-protege relationship such as men frequently develop with faculty sponsors. Unfortunately, in the past this has been difficult to establish between persons of the opposite sex. (Astin 1976, Epstein 1970, Dickerson 1974, Harris 1970)

Angrist, 1972, also addresses this subject but relates it to career patterns of women. She suggests that career oriented women benefit most from role models and broad enriching environment that reveal multiple options for women's adult life. Through these two influential factors, careers become a viable commitment for women.

Men and women in the work force continue to seek traditional "male" "female" jobs. This is not surprising when one examines the curriculum areas that women and men students enroll in while in college.

For example, during autumn quarter 1977, the departments enrolling the highest number of women students were home economics, nursing, and elementary education. Male students, on the other hand, had larger numbers proportionately to women, in agriculture, engineering, secondary education and architecture. (Appendix A.)

A preliminary study made by this investigator of the numbers and rank of male and female faculty at Montana State University illustrates that they, too have chosen traditional male-female occupational areas in the curriculums they represent. Noteworthy is the fact that twenty-five departments have only male faculty, eg: Chemistry; Psychology; Film and T.V; Mathematics, History, Government and Philosophy; all Engineering departments and all Agriculture department. The total number of full time male faculty according to this survey is 527 and female faculty 134. There are 175 male full professors, 11 female; 171 male associate professors, 30 female; 132 assistant professors, 58 female (Appendix B). Thus it is clear that few role models for women exist at Montana State University especially in non-traditional fields.

Students, male and female, need mentors . . . other persons of the same sex who they can look up to, act like, talk to and want to be like. (Astin 1976, Epstein 1970) Unfortunately for women students at M.S.U., few female faculty members exist who can be utilized in this capacity. Inasmuch as women faculty are few in numbers to provide encouragement, give information and discuss "how doors can be opened" an alternative strategy should be developed, so that young women on campus can explore themselves, their strengths, weaknesses and investigate new career choices with persons aware, sensitive and concerned with the total problem.

Although "liberal" males do exist, the literature indicates that generally male faculty are not sensitive to women's needs and maintain myths and stereotypes as to the roles of women in our society (Chronicle of Higher Education, 1976). Since Montana State University is predominately dominated by male faculty, perhaps an effort should be made to provide them with training, knowledge and understanding that will help them to become sensitive and aware of the total situation. For the less obviously "liberal" female faculty members, training of this kind can be of equal advantage to broaden their effectiveness with both female and male students.

The feasibility of a project encompassing these general goals was recently studied at M.S.U. The result from this inquiry was the submitting of a federal grant proposal to obtain funds which would allow for an investigation to determine if presentation of current information on men and women, their achievement patterns and the world of work, coupled with examination of one's stereotyping and biases, could effect attitudinal and behavioral change of students and department heads who participated in the study.

Faculty heads were chosen as the primary group receiving this advisor training because, according to Dr. Margarette Wessel, Director of General Studies, "they are the first person students go to when investigating a career possibility." Also, if one examines the effect

of the Department Head's power and influence, any attitudinal and behavioral change in this individual should stand a greater chance of filtering down through the department.

The project, as briefly stated, was funded by the Department of Health, Education and Welfare to be administered by the Student Affairs Office at Montana State University during the 1977-78 school year.

STATEMENT OF THE PROBLEM

The problem of this study was to determine if there is a difference in attitudes and behavior of Heads of Departments at Montana State University after participating in training designed to reduce sexual bias and sex role stereotyping as compared to a similar group not receiving this treatment.

General Questions to be Asked

1. Is the intervention strategy effective in reducing sex bias and sex role stereotyping as it applies to women in those heads of departments who participate in the project?
2. Is the intervention strategy effective in reducing conscious or unconscious sexist behavior of heads of departments in the advising function?

3. Is there a difference in sexual bias and sex role stereotyping as it applies to women between male and female heads of departments before and following the treatment?
4. Is there a difference in the sexual bias and sex role stereotyping as it applies to women among persons in various age categories?

GENERAL PROCEDURES

The problem was approached in the following manner. All official and unofficial heads of departments, including directors and coordinators, were invited to participate in the training project. Each was briefed on the procedures to be followed and their role if they chose to participate. Volunteers were requested. Of those who did volunteer, two groups (experimental and control) were identified by stratified random sampling procedure. Both groups were given a pre-test to assess the extent of their liberalization of attitudes toward women. The Attitude Toward Women Scale (AWS) was utilized for this purpose. (Appendix C.)

The intervention strategy consisted of a 1½ day workshop retreat in January 1978 and another one day retreat four months later in May 1978. The Attitude Toward Women Scale was administered to the control and experimental group after each of the retreat workshops.

Behavior change was examined by use of an Advisor-Student Rating Scale. (Appendix D.) Students were asked to rate heads of departments on various factors after conferring with Department Heads.

LIMITATIONS OF THE STUDY

1. The investigation is limited by a certain sample at one university, at a particular time with assessment procedures administered immediately after treatment.
2. The attitude index used in this study was designed to examine attitudes toward women in our society, therefore, it is used to examine sex bias and sex role stereotyping only as it applies to women.
3. The investigation is limited to the resources of Montana State University and the choice of literature selected for review by the investigator.

DEFINITION OF TERMS

The terms listed here were used throughout the study and are defined as follows:

Socialization (sex roles). The process by which women and men learn attitudes, behaviors and goals of their particular sexual group.

Heads of Departments. Persons responsible for the administration of a department or program. May be designated as a director or

coordinator.

Sex Role Stereotyping. The assigning of characteristics, attitudes, and behaviors to an individual or group based primarily on the single factor of sex designation.

Sexual Bias. A tendency to favor or exhibit prejudice toward an individual or group based primarily on the single factor of sex.

Prejudice. A preconceived idea, usually negative, based on bias or opinion held in disregard of facts contradicting it.

Discrimination. The overt expression of favoritism or prejudice toward an individual or group.

Sexism. Prejudicial attitudes and patterns of behavior toward either sex, based on cultural stereotypes or myths pertaining to that sex.

SUMMARY

This study focused on investigating the effectiveness of an intervention strategy used at Montana State University with heads of departments to effect behavioral and attitudinal change regarding sex bias and sex role stereotyping. Demonstration of its value may influence administrative decisions regarding future training in this area for other persons in the university community.

Chapter 2

REVIEW OF THE LITERATURE

INTRODUCTION

In recent years much attention has been given to the status of women in our society. Efforts have been made to increase access to resources and power as well as redefine the identity of the American woman. Men have also encountered a movement toward change with increased personal life options.

This chapter will classify the review of literature associated with the problem under investigation into six (6) major categories: Women and Work, Women and Education, Socialization, Implications of Socialization, Women Students in Higher Education, and Research: Attitudes Toward Sex Roles.

WOMEN AND WORK

Demographic Information

Large numbers of women have entered the work force. The Women's Bureau of the U.S. Department of Labor (1972) reports that 50 percent of the women 18-64 years are currently employed. This is a total of 31 million women working today or 40 percent of today's total work force.

The U.S. Department of Labor (1972) also states that nine out of every ten women will work at some time in their lives. A majority

of women will work for twenty-five years or more, whether or not they marry, whether or not they take time out to raise children. (Sandler, 1972.)

The reasons these women are working is not because they are bored. Peterson's (1965) study indicates that the most frequent reason cited by women for working is financial. "Most women like men work because of financial necessity. This is true of the married workers as well as the single woman." The accelerated cost of living due to inflation has propelled more women into the marketplace to help provide for the economic needs of themselves or their families.

Sex Stereotyping in Employment

The Department of Labor in a report entitled "Women Workers Today" provides information on what jobs women hold in the work force. Some occupations are strikingly dominated by men. Women faculty in institutions of higher education are reported to be twenty percent of the total employed, women scientists ten percent, women physicians six percent, women lawyers five percent, women engineers one percent and women federal judges one percent of the total number employed. (Appendix H.)

This report sheds further light on women in the professions by stating that the numbers of women in these fields have been decreasing rather than increasing as is commonly thought.

Where, then, are women workers? In contrast to the declining professional and technical workers, the proportion of women in the less skilled and lower paid service occupations is increasing. Women were 62 percent of all service workers in 1975 as compared with 40 percent in 1940. (Appendix I.)

Women are more apt than men to be white-collar workers, but the jobs they hold are usually less skilled and pay less than those of men. Women are two-fifths of all professional and technical workers, but these women are most likely to be teachers (2.1 million women) and health workers (1.4 million). In fact, women account for 72 percent of teachers (except college) and 64 percent of all health workers. Women are less likely than men to be managers and administrators, and represent only about one-fifth of these workers. They are, however, 78 percent of all clerical workers (including more than 4 million women secretaries, stenographers, and typists). (Department of Labor, 1977.)

About 1 out of 7 women workers is employed in a blue-collar job, but almost half the men are in such jobs. Women are almost as likely as men to be operatives, but are very seldom employed as skilled craft workers - the occupation group for 1 out of 5 men workers. Only 5 percent of all craft workers are women. (Appendix I.)

After examining the data provided on occupational choice of male and female, the question comes to mind, why do people gravitate

toward certain occupations or professions based largely on the sex of the individual? Are not other differences of equal importance?

Our culture is instrumental in typing occupations by sex due to what might be described as pervasive attitudes concerning the proper roles for men and women in our society. As a result, occupational sexual typing occurs and is perpetuated by large numbers of one sex engaging in that occupation. A normative expectation results as to "that's how things are". Characteristics necessary for success in a sexual-typed occupation become those associated with either a male or female role stereotype. Thus, occupations for women are found closely associated with homemaking roles; others to their socialization as man's helpmate. On the other hand, "male" occupations from which women were generally excluded tend to be those that involve "non-feminine" pursuits or those that necessitate supervision of other employees. The division of labor that occurs is self-perpetuating since each sex is socialized, trained and advised or counseled into certain jobs and not others.

(Sawhill, 1972.)

The particular division of labor that emerges has little social, economic or moral rational. Cross-cultural and historical data suggest that our present occupational structure does not affect basic and unchanging difference in temperament or ability between the sexes. Only in cases where both women and men have internalized limitations

placed on them by societal expectations, evidence indicates that the present division of labor is clearly not the result of differences in the quality of the male and female work force. (Sawhill, 1972.)

Inequality in Earnings

One result of disparity in employment may be seen in income figures. It has been found that women working full time, average about 3/5 of the earnings of males working full time.

Income levels of women are lower than men's in our society in almost every field. Women clerical workers earn less than 3/5 of what men clerical workers earn; women sales-workers earn about 2/5 of what men in similar positions earn; women managers, officials, and proprietors earn slightly more than 1/2 of what men in equivalent situations earn. The narrowest gap between the sexes is on the professional and technical level. Women earn about 2/3 of what men earn in these areas. Starting salaries for women with qualifications equal to men were lower in most fields. (U.S. Department of Commerce, 1973).

The Women's Bureau of the Department of Labor (1974) indicate that women earn about 60 percent of men's earnings. In the Professional and Technical areas women workers earned 60 percent of men's income, non-farm women, managers and administrators earned 59 percent of men's income, women clerical workers earn 60 percent of

male workers in this area, women sales workers earn 41 percent of male's income and women service workers earn about 60 percent of the income males earn in this field. (Appendix I.)

Persons in the professions seem to encounter additional problems in obtaining "benefits" if not employed on a full-time basis. Asting (1969), Loring and Otto (1976) indicate that women who are married or single women with children either by choice or by necessity continue to assume primary responsibility for the care of the home and family. These women are the primary source for part-time professionals. The U.S. Bureau of Labor Statistics define part-time employment as working less than 35 hours per week. Hine and Lutack (1978) suggest that part-time professionals are denied the status commensurate with their contribution. They receive marginal salaries and frequently are denied benefits such as hospitalization and retirement. In addition to this they are often viewed by their colleagues as somewhat less than "career" professionals. Thus part-time employees often receive no benefits, little status, and no well-defined career ladder. (Hine and Lutack, 1978.)

The Women's Bureau of the Department of Labor (1972) seems to sum up the situation by saying "Women workers are concentrated in low paying, dead-end jobs. As a result the average woman worker earns about three-fifths of what a man does, even when both work full time year round."

Conditions of Employment

The Institute for Social Research (ISR) has found in addition to earning less, women on a average "work harder" than men. It appears this study equates "working hard" with time on the job and reported "energy" spent doing the job. This 1977 study showed that the average employed man spends 52 minutes of each working day not working; taking coffee breaks, relaxing, conversing or taking long lunches. The average woman worker, on the other hand, spends 35 minutes of the day taking breaks.

This particular study found that the average working man earns \$7 an hour while the woman earns \$4.38. When work hours are adjusted to account for total break time and time spent for on-the-job training, the rates became \$8.48 for men and \$4.86 for women.

Women also ranked higher on a "work effort scale" based on individual report of energy they expend on the job. The study showed that women give 112 percent of the effort given by men to their jobs. When education, years of work experience and yearly work hours are taken into account, the figure increases to 115 percent.

The study also suggests that professionals, union members, part-time employees (less than 30 hours a week) and unmarried women expend the greatest effort per hour of work. Unmarried women take the least amount of break time and score highest on the effort scale. Married

men score slightly higher than unmarried men on the work effort scale but take more total break time. (Stafford, 1977.)

Sex Bias and Discrimination

Myth about work roles for men and women are the basis for the obvious inequality in the work place. It would be easy to say that prejudice against women by men is the cause of this situation; however, that could only be half correct. The other cause is clearly women themselves; how they define themselves and each other. (Goldberg, 1968)

Sandler (1972) states that the hardest thing about the women's movement is that there is no real enemy that one can hate with self-righteous justification. Men are not the enemy, for many of them have been hurt in different ways, by the same rigid stereotypes that hurt women.

The extent of a person's commitment to their bias is discussed by O'Leary (1974). This study examined sex role stereotyping attitudes of males in authority and provided the basis for conclusion that even with external controls such as legislation, feeling about the lack of competency in women that often inhibits women's advancement would be continued by these employers and would result in more subtle but none the less effective means in maintaining barriers to women's occupational advancement.

Epstien (1970) also found that persistent subtle discrimination exists in the protege-sponsor relationships or colleague systems which again cannot be easily controlled through legislation. Sex bias attitudes are so ingrained in our society that they seem right and appropriate in spite of governmental efforts to eliminate them. Eve Merriam's statement seems to add clarity to this perplexing problem, "Sex prejudice is the only prejudice now considered socially acceptable."

Willet (1971) confirms the aforementioned ideas on stereotyping and further elaborates on the topic.

This is the time of transition in the working relationships between women and men, characterized by certain themes. One of them is women's poor image of themselves. Believing themselves to be lesser, smaller, more passive, weaker, more trivial, incapable of coping with men and other women as equals, incapable of taking hold of a big job, they behave as if they are this way and then get confirmation from others of their own beliefs.

Another theme is men's belief that women cannot really do big jobs, that women are not creative, and that women in offices, government, and industry should hold the jobs closest to housekeeping and wife's duties. That is, that women should take care of the routine activities, the maintenance chores, and lubricating trivia while men do the big thinking and contact work. Men feel that in helping a man "do his thing", most women derive satisfactions and a feeling of being needed. And finally, they feel that any woman who does big jobs, who is creative, and is successful must be a hard, nasty bitch, or sleeping with a guy who put her where she is.

These are myths. But they have been the operating myths of the working world, and they help to explain why it is that women are offered and accept low pay, that capable, educated

women accept dead-end office-wife type jobs; that women who work full-time also do virtually all the housework and child care without complaint in a family where a husband is also present. They also explain the "volunteer" syndrome in suburbs -- the middle class housewife who does not think she is worth much as a worker, but wants to work, and fritters her time away in volunteer chores where she feels "needed", but not valued.

Some readers may find some bias in the above quote in addition to some truth.

WOMEN AND EDUCATION

It would seem that more education for women might be the solution to this obvious discrepancy in salaries and positions held. Data from the Department of Labor (1974), however, indicates that the average woman in the labor force has completed a median of 12.5 years of schooling -- the same as her male counterpart. The Department of Labor (1974) provides data that indicate a higher proportion of women workers (72 percent) than of male workers (67 percent) had completed high school in 1974. However, a higher percent of male workers (31 percent) than of women workers (28 percent) had some college education. Thus women workers as a whole have as many years of education as males, but as a group do not progress as far up on the educational ladder as males. (The Higher the Fewer, 1974.)

Recent years have changed the picture somewhat. Larger number of women are entering college, graduate and professional schools

but women are still less likely to receive degrees than males.

(Higher the Fewer, 1974, Chronicle of Higher Education, 1977.) The U.S. Office of Education provides data on specific degrees conferred in areas of study in higher education for males and females. A total of 370,000 females received BA or first professional degrees to 513,975 males. Women with PhD.'s numbered 4,570 while 26,534 males received doctorates in 1970-71. Also from this report it is apparent that women who do receive degrees are concentrated in curriculums which lead to jobs in more traditional employment areas for women. (Appendix J.)

Similar information is provided in the Summary Report (1975) of Doctorate Recipients from United States universities. The three main areas (80 percent of all doctorates for women) were in education, arts and social science. Again, these are traditional occupational areas for women.

Inequality in Earnings

The degree for women is also far less advantageous than for males in terms of anticipated salaries. It is estimated that a woman with a B.A. degree can expect to earn no more than a male high school dropout. (Sandler, 1974.) From figures by the Women's Bureau of the U.S. Department of Labor (1971), salaries are well below the male counterparts in the occupations requiring a college degree.

(Appendix K.)

Centra (1974) reports that the average income for a woman with a doctorate and five to six years experience is \$2,300.00 less than a comparable male. With 22-23 years experience, women average \$5,300.00 less than for males.

Thus it seems to indicate that women have in the past consistently received lower paying positions and possibly lower status jobs than what could reasonably be expected on the basis of their education, abilities and work experience.

Security Employment

Not only do women seem to encounter problems with the status and salaries of the jobs they hold, they also appear to many times encounter difficulties in securing employment.

The College Placement Council reports in the March, 1978 Guidepost that four out of every five job offers are going to men. Women's offers account for only 19 percent of the total bachelor's offers and 17 percent of the Masters. However, this is a considerable improvement over March 1975 when the women's ratio was 11 percent at the bachelor's level and 10 percent at the masters. The College Placement Council Survey does not cover teaching positions. As a large percentage of women graduates go into this occupation, the proportion of offers to women would undoubtedly be higher.

Conditions of Employment

Women who do obtain higher degrees and ultimately locate employment often seem to find themselves in jobs with little advancement potential. Guttman (1972) in her article, "Is the gray mare only a workhorse?" suggests that lack of opportunity is the cause for this situation and not a lack of interest on the part of women. Of course, when women do aspire to positions of prominence in the work world, some chance of "making-it" must exist. At present, according to the literature available, it seems reasonable for women to feel "it's all not worth the effort."

Rosabeth Moss Kantor (1977) addresses this subject and states many women do have low job aspirations, but so do men who are in positions of blocked opportunity. Lack of opportunity to succeed, not a personality style that shuns success is often what separates the unambitious from the climbers. When the jobs include opportunities for advancement, women want to advance. But jobs without opportunities depress a person's ambition and self-esteem, for men as well as women.

Gorniek and Morgan (1971) provide data on women in decision-making positions in this country. At the time of this report, women comprise only 4 percent of federal employees in the highest grades and 2 percent of all business executives listed in Standard and Poor's Directory. Women are only 22 percent of faculty and professional staff of colleges and universities, 1 percent federal judges and 1 percent in the United

States Senate. Due to such low representation in these influential positions, law and public policies seem slow to reflect the needs of women.

SOCIALIZATION

The question that comes to mind after examining our present day situation is "how did we arrive at this state of affairs?"

The answer is relatively simple, yet quite complex. Socialization may be defined as the process by which (a) the individual develops a personality as a result of learning much of the content of a given culture, and (b) culture is transmitted from one generation to the next.

The process of socialization continues throughout a person's lifetime. It is a learning process involving change in the individual's goals, beliefs, or patterns of action. It involves the various societal values, norms and patterns of interaction.

Within a culture an individual learns much of the content of a given culture, but not all of it. For example, females do not learn every aspect of the culture that is transmitted to the male. Limitations also exist in that each individual has a unique history of interaction experiences; he or she interacts with certain specific individuals and these interactions occur in certain specific contexts or situations.

In spite of these differences, the socialization process on a whole, transmits culture from one generation to another. The individual is shaped but he or she also shapes others (Schlossberg, 1977).

Early Socialization

Children are educated or socialized from birth to many things -- one of which is the wide-reaching assigned role of gender (Bem and Bem, 1972).

It is in the early socialization period that bias, role expectations and sex role stereotyping are first formed. Girls and boys internalize their sex roles differently according to cultural definitions of what is considered male and female behavior. Girls learn their central role obligation is procreation and that their role obligations are preferably confined to family and community. Within these boundaries, the sex role images acquired by females are of a nurturant helping and empathizing nature. (Hartley, 1976)

Boys on the other hand, learn what they must not be before they gain much knowledge of what it is they are supposed to be. The consequences of this process can be painful and long lasting, often leading to a life-long aversion to any quality thought to be feminine and a constant striving for the ways in which to be masculine (Ruth Hartley, 1976, p. 235).

A description of stereotyped traits of the sexes as formed through socialization are provided by Bardwick and Douvan (1971):

What are big boys made of? What are big boys made of? Independence, aggression, competitiveness, leadership, task orientation, outward orientation, assertiveness, innovation, self-discipline, stoicism, activity, objectivity, analytic mindedness, courage, unsentimentality, relationality, confidence, and emotional control. What are big girls made of? What are big girls made of? Dependence, passivity, fragility, orientation, interpersonal orientation, empathy, sensitivity, nurturance, subjectivity, intuitiveness, yieldingness, receptivity, inability to risk, emotional lability, supportiveness. (p. 147).

O'Neil, Meeker and Borgus, 1977, list four factors which may affect socialization, sex role learning and the career choice process in college women. (1) Societal factors, including educational experiences, peer group influences and effects of mass media. (2) Familial factors, early childhood experiences, mother's role model and father's role model. (3) Socioeconomic factors, including social class, race, sex discrimination and supply and demand of jobs. (4) Situational factors includes the course of least resistance and chance.

Socialization in the Schools

While it seems that the most intense and overt socialization occurs in infancy and childhood, social learning is believed to continue throughout life.

Rossi (1969) says, for example, that it is during the early years of elementary school education that young people develop their basic views of appropriate characteristics, activities, and goals for their sex.

Instead of broadening the base on which children form their images of male and female roles, the school perpetuates the image children bring from home. It has been mother who guided their pre-school training; now in school it is almost exclusively female teachers who guide their first serious learning experiences. As for the girl, women are again the ones in charge of children. Probably, her teachers expect her to be quiet, dependent, with feminine interests in doll and house play and dressing up. Thus she is more likely to enter classes for child care, cooking, and practical nursing.
(Rossi, 1969)

Ruth Harley's (1976) article discusses how boys 8 - 11 feel in terms of what is expected of them.

They have to be able to fight in case a bully comes along; they have to be athletic; they have to be able to run fast; they must be able to play rough games; they need to know how to play many games - baseball, basketball, football; they need to be smart; they need to be able to take care of themselves; they should know what girls don't know - how to climb, how to make a fire, how to carry things; they should have more ability than girls; they need to know how to stay out of trouble; they need to know arithmetic and spelling more than girls do.

We learn a little more when we ask, "What is expected of boys?" We find that they believe grown-ups expect them to be noisy; to get dirty; to mess up the house; to be naughty, to be "outside" more than girls are; not to be crybabies; not to be "softies"; not to be "behind" like girls are; and to get into trouble more than girls do. Moreover, boys are not allowed to do the kind of things that girls usually do, but girls may do the kind of things that boys do.

It is believed that these images described are carried through life and affect men and women's notions about probable future occupational involvement. Possibly occupational roles are often chosen with these sex-related qualities. Parents, teachers, peers, and communication media may reinforce the occupational images and stereotypes throughout the socialization process.

Joffe (1971) studies a progressive nursery school that consciously tried to avoid teaching sex stereotyped behavior to boys and girls. Even here, though, subtle influences from some of the teachers motivated sex-typed behavior. For example, the songs, storybooks and games were stereotyped. Furthermore, girls were complimented on how nice they looked, boys were more rewarded for aggression than were the girls.

As girls and boys move up the age ladder, out of elementary school and into courses for older children, the same distortions occur at a more complex level. Often, young people are instilled with the largely unexamined assumption that the only alternatives possible for

the future are those which were possible in the past. (Bart, 1971)

It appears that education, too, may pose a current incongruent message for young girls. That is, girls are encouraged equally with boys to achieve good grades, and up to a point, both boys and girls take the same subjects. Thus, while a girl hears the message to do well in school, she, in reality, has had limited pathways outside the school in which achievement of high grades mattered. In the so-called land of opportunity, females may have to deal with conflicting messages relative to their status of being female. (Schlossberg, 1977).

Nickerson (1975) examines ways in which schools are a major agent in the continuing socialization that leads to discrimination against women and sex role stereotyping. Intervention strategies available and currently being explored are discussed as ways of counteracting the sexual stereotypes.

Women's Values

Values of women are significant factors in their sex role orientation and career planning. Bordwick and Douvan (1971) believe women emphasize interpersonal values at the expense of achievement values. McClelland (1965) suggests women are different than men in their values. Women are more interdependent and relationship-oriented than men. They are more nurturant, self-disclosing, caring, moralistic,

and alturistic than men. Men tend to be more analytic and manipulative.

Values change in women's lives, depending on age and the role a woman assumes. Arnott (1972) found in her study of women's roles, values, and the profit associated with them, were found to shift in anticipation of role changes.

Psychological Differences

In conjunction with an examination of the process of socialization, a look at psychological differences as reported by research is appropriate. One must not only be aware of differences as they exist, distinguishing them from commonly held myths, but also be sensitive to possible causes of these documented differences. Are they inevitable or are they the product of socialization?

The psychological nature of men and women have been studied for a number of years. Maccoby and Jacklin (1974) attempt to analyze the findings of past research in light of present day knowledge.

Four sex differences were identified as being fairly well established: (1) girls on an average have greater verbal ability than boys, (2) boys on an average excel in visual-spatial ability, (3) boys on an average excel in mathematical ability, (4) boys on an average are more aggressive.

Macoby and Jacklin (1974) also cite a number of unfounded beliefs about sex differences. (1) Girls are more "social" than boys, (2) girls are more "suggestable" than boys, (3) girls have lower self-esteem, (4) girls are better at rote learning and simple repetitive tasks, boys at tasks that require higher-level cognitive processing and inhibition of previous learned responses. (5) Boys are more "analytic". (6) Girls are more affected by heredity, boys by environment. (7) Girls lack achievement motivation, (8) girls are auditory, boys visual.

Maccoby and Jacklin's analysis of research in the psychology of sex differences differs somewhat from Tyler's study in 1965. Tyler found that research indicated females were higher in verbal fluency, rote memorization, dexterity and perceptual speed. Males, on the other hand, were higher in mathematical reasoning, spatial judgement and science.

Vocational Indecision

Lenore Harmon (1970) questioned college women about their vocational planning during adolescence and found that these women had only considered a limited range of occupations as teenagers. They were what might be described as immature in terms of vocational exploration. Ginsberg and Associates (1951) have theorized that fantasies and perceived opportunities play an important role in the

occupational choice process. When society predetermines limited vocational possibilities for women, little thought is given to other alternatives.

A study by Ralph Turner (1971) confirms this. A substantial number of women when asked what occupation they thought they might pursue as life's work were unable to name a particular vocational choice and the remainder largely chose traditional vocations. Turner concluded that women lack realistic knowledge about the vocational choice they are making.

IMPLICATIONS OF SOCIALIZATION

Unfortunately, as a result of this over-classification actual harm may be done, particularly to women. Implicit in the dichotomization of behavior patterns deemed "acceptable" for boys and girls is the standard of males being superior (more valued) and females inferior (less valued). Brown (1956) found that almost no boys between the ages of 3 and 10 want to be girls while a substantial number of girls do wish they were boys - a reflection of the girls awareness of the relative devaluation of the female role.

Self-Concept in Women and Men

One possible result from socialization may be damaged self-image and a decline in self-respect among the numbers of persons, male and female, who are unable to transcend the narrow stereotypes

of behavior prescribed for them.

Self-concept is examined in a study by Maury Lacher (1975) on Sex Differences in Self Evaluation of Academic Achievement and Ability. Women students were found to underestimate future performance on intelligence and academic tasks while men overestimated their performance. Women tended to state that grades were over-representing their ability and men felt that their grades under-represented their ability.

Women inevitably come to internalize the general disesteem in which they are held as demonstrated by Goldberg (1968) in his study "Are Women Prejudiced Against Other Women?" By testing the reaction of women undergraduates to an essay signed alternately (John McKay" and "Joan McKay") he found women downgrade the work of professionals of their own sex not only in traditional masculine fields but in traditional feminine fields as well.

Willett (1971) contends that a woman's poor self-image can prevent her job advancement. Cless (1969) points out that lack of confidence in young women can result in an underrating of their abilities. It is believed by Cless that this may be a factor in the lower career aspirations of high school and college women student in comparison to men.

A study conducted by Deaux and Emswiller (1973) indicates that this "downgrading of females in our society" also relates to attitudes concerning success. In evaluating performances on sex-linked tasks, both men and women attributed a male's success to skill and intelligence but considered a similar successful performance by a female as "lucky". The results of this study suggest that because of different socialization, women develop less confidence in their skills, less independence, and lower self-esteem, than do men. Because a woman lacks self-confidence and self-esteem, she is more vulnerable to a fear of failure. Consequently, when options are open to her, she is less likely to take advantage of the opportunity.

Besides a fear of failure, women also experience a fear of success. (Matina Horner, 1971) Horner's study indicates that normal achievement strivings of women can be inhibited by the expectation that success will be followed by negative consequences because achievement is not appropriate for females.

A woman's status is measured in terms of "who they marry"; a man's status is measured by how much money he is worth. This conditioning is taking place at a time when egalitarian principles are being recognized in institutions of higher learning and when the whole structure of public education rests on acceptance of equality of opportunity, without regard to color, race, religion, or sex. The

result is confusion, ambivalence and emotional havoc among girls with talents or intellectual abilities. Bardwick and Douvan (1971).

Stein and Bailey (1973) similarly report that expectations are crucial in outcome. Women are forced to have a different pattern of achievement motivation than males. Women reduce achievement efforts when they perceive that their success might jeopardize their social success.

Dynamics of Bias and Sex Role Stereotyping

Socialization explains why we are as we are. Bias and stereotyping, however, is what we all do to perpetuate the system.

Human beings could not function from moment to moment if they had to approach each situation as something entirely new. We require prior experience to help us deal with almost every aspect of our lives. Learning itself is the making of finer and finer distinctions as well as being able to see similarities not always obvious on the surface. Moreover, survival in any culture required sharing a set of normative expectations that result in categorizations that allow people to process situations quickly and to react as if by instinct. (Schlossberg, 1977)

Not only do we categorize but we also often attach value labels to different categories. In many cases these value judgements do no

great harm, only we are losers insofar as we constrict our possibilities for experience and opportunities for enjoyment. But when it comes to attaching value labels to human beings on the basis of their membership in a category, much damage may result. Whether the stigmatized group comprises blacks, women, the poor, the old, the physically handicapped or whatever, the danger is the same. That individual's life chances are limited by possible erroneous assumptions based on that individual's membership in a particular group. Worst of all, the inaccurate expectations can carry it all one step further, making the false come true. (Gornick and Morgan, 1971)

Bem and Bem (1972) have called the sex role stereotyping the "homogenization" of women. The traditional female sex role (or male role) does not recognize the individual differences in abilities, interests, temperaments among persons.

Bradwick and Douvan (1971) pointed out that sex roles are changing, but they have not yet accommodated the many societal changes now taking place.

Caroline Bird (1970) categorized some of the possible sex role orientations adopted by women. She divided these outlooks into four categories.

New Masculinism - It recognizes many motives. It does not define a specific woman's "place". It charges her instead with a duty of finding the task the men around her need done from moment to moment...providing she does it in the name

of somebody else and not for the greater glory of herself.
(p. 150)

Old Masculinists - ...believe that women's place is in the home, that her work is prescribed by her anatomy, and that she is mentally and physically unable to do men's work.
(p. 151)

New Feminists - ... think sex roles are obsolete at work and should not be revived. They see no use in ascribing special advantages or handicaps to women in most jobs.
(p. 153)

Old Feminists - ... are out to prove that women can be like men, if necessary, by remaining single. (p. 153)

Helen Farmer (1971) sees women's roles at present not being clear. She feels that this contributes to women's difficulty with career planning. There is ambiguity on the life style appropriate to women.

Super (1957) developed a theory of vocational choice that relates to women's view of their appropriate sex role. Categories were formulated describing the sex roles described by Super in relation to vocational choice.

Stable homemaker - no work outside the home, married.

Conventional homemaker - work before marriage but not afterward.

Stable working - continuous work throughout life, single.

Double track - continuous work throughout life, married.

Interrupted - work before having children, homemaker, return to work again, married.

Unstable - in and out of work force at irregular intervals.

Multiple trial - series of unrelated jobs.

Patterson (1973) believes that for women, vocational identity and sexual identity are interrelated. In order to define their sexual role, girls must make decisions regarding the selection of a husband, establishing a home, and philosophy of child care.

Role Conflicts in Women

Profound changes in the roles of women during the past century have been accompanied by innumerable contradictions and inconsistencies. Cultural norms are often functionally unsuited to the social situations to which they apply. Thus they may deter an individual from a course of action which would serve their own or society's interests best. Or if behavior contrary to the norm is engaged in, the individual may suffer guilt over violating mores which no longer serve any socially useful end. Mira Komarovsky (1956) in her article on cultural contradictions and sex roles sets forth in detail the nature of certain incompatible sex roles imposed by our society upon the college woman.

Two roles are defined as being part of the social environment of the college woman at this period of time. The goals set by each role are mutually exclusive and the fundamental personality traits

each evokes are diametrically opposed, so that what are assets for one become liabilities for the other; and the full realization of one threatens defeat in the other.

The two roles are identified as the "feminine" role and the "no sex role". The feminine role is described as the "good sport", the "glamour girl", the "young lady", the domestic "home girl", etc. The "no sex role" at all is one which obliterates the differentiation in sex. It demands of woman much the same virtues, patterns of behavior, and attitude that it does of men of a corresponding age.

The following excerpt from Komarovsky's article illustrates the inconsistency of goals set for the young woman by her family.

One student writes:

How am I to pursue any course single minded when some way along the line a person I respect is sure to say, "You are on the wrong track and wasting your time." Uncle John telephones every Sunday morning. His first question is: "Did you go out last night?" He would think me a "grind" if I were to stay home Saturday night to finish a term paper. My father expects me to get an "A" in every subject and is disappointed by a "B". He says I have plenty of time for social life. Mother says "That A in philosophy is very nice dear. But please don't become so deep that no man will be good enough for you." And, finally Aunt Mary's line is careers for women. "Prepare yourself for some profession. This is the only way to insure yourself independence and an interesting life. You have plenty of time to marry."

Another student recollects a switch in role expectations taking place almost over night.

I could watch my older brother in skating, sledding, riflery, ball, and many games we played. He enjoyed teaching me and took great pride in my accomplishments. Then one day it all changed. He must have suddenly become conscious of the fact that girls ought to be feminine. I was walking with him, proud to be able to keep up with his long-legged steps when he turned to me in annoyance, "Can't you walk like a lady?" I still remember feeling hurt and bewildered by his scorn, when I had been led to expect approval.

Role conflicts may continue throughout women's life times.

One particular area of conflict in roles could be when women begin to work outside the home.

The conflict that a married woman faces is one between expectations of her in the home and the motivations and satisfactions of work. Helen Farmer (1971) describes this as guilt over having a career if she has a family as well as a feeling that she is missing something if she does not work in our achievement oriented society. This conflict amounts to: "do everything - be a mother, be a housewife; and have a career too." (Bailyn, 1969).

In attempting to meet these roles equally well women experience role overload. Epstein, 1970, and Novin 1972 also believe that women who pursue career, marriage, and family may experience conflicts and tensions. These tensions may develop when women feel guilt about leaving their children under the care of others. They may also fear that they may threaten their husbands by competing or outranking them in their career achievement. Also women may receive negative reactions from other women peers who are threatened by the working

woman's dual roles, commitments and life style changes. Women who experience both a career and family concurrently, may experience guilt, role overload, and social pressure and disapproval from significant others in their lives.

Role conflicts for women also exist in the area of the need for achievement and the need for affiliation and social approval from males. The conflict exists when a woman feels unable to achieve career potential or achievement, because of the perceived loss of affiliation or approval and threat to men. (Epstein, 1970)

Epstien (1971) found that in a study involving women lawyers that women were seen playing many roles with different expectations for each role often inconsistent with one another. Kosa and Coker (1971) reported similar findings from a study involving women physicians. Conflicts existed for these women between sex roles and professional ideas. Edwards (1969) and Tangri (1972) indicate in their research that male peers can have strong influences on women's career plans.

Men and the Male Stereotype

The male stereotype also appears to exist in our society. It seems to dictate to men the type of life to lead, the things to do, the places to go, and the people to be with. The male stereotype may exist in every aspect of American life - politics, religion, the arts,

education, business, health, government, etc.

In American society men must deal with the conflict that is generated by the realities of their lives and the imposed stereotype of the Great American Male. (Hoskell, 1975)

Hoskell (1975) states that the stereotype of the Great American Male means a man who is:

1. Highly successful in business - has a high corporate position with a great deal of responsibility, power, etc.
2. Financially productive - owns a house, has a car for himself and wife, and has good clothes.
3. Sexually attractive - physically in good condition and attractive so that women other than his wife find him physically desirable.
4. Physically productive - can build things, repair cars, etc. as well as be capable of producing physically attractive off-spring.
5. Knowledgeable - about the business world, the state of the economy, the political situation, and his own personal and professional goals and directions.

The cost of pursuing the Great American Male stereotype can be considerable. It can result in physical disability or early death, heart disease, fatigue, heart failure, overweight, ulcers, high blood pressure, frustration, anger, hostility, alcoholism, drug dependency, cigarette smoking, few intimate relationships, failure and a few collaborative relationships (Hoskell, 1975).

The benefits of achieving this idea is pushed by advertising media: popularity, happiness, satisfaction, access to quality goods,

attractive surroundings (including people), feeling security, power, and sexual pleasure.

Closely associated with this male stereotype are the elements of achievement, competition, power, success, and conflict. The number one priority of the male stereotype is work. Only through work can the male achieve this ideal and consequently the other elements of life (family relationship, friends, recreation, growth, and development) take second, or lower, priority. (Hoskell, 1975)

Values of this kind seem to be developed very early. Ruth Hartléy (1959) describes what a young boy sees as his future described in terms of the things men need to know and be able to do: "They need to be strong; they need to be ready to make decisions; they need to be able to protect women and children in emergencies; they have to have more strength than women; they should know how to carry heavy things; they are the ones to do the hard labor, the rough work, the dirty work, and the unpleasant work; they must be able to fix things; they must get money to support their families; they need "a good business head."

Young boys learn early that: 'men are usually in charge of things; they work very hard and they get tired a lot; they are supposed to be bolder and more restless, and have more courage than women. Men like boys mess up the house.

On the positive side, men mostly do what they want to do and are very important. In the family they are the boss; they have authority in financial affairs and they get first choice in the use of the most comfortable chair in the house and the daily newspaper. They seem to get mad a lot, but are able to make children feel good; they laugh and make jokes more than women do. Compared with mothers, fathers are more fun to be with; they are exciting to be with and have the best ideas. Ruth Hartley (1959).

WOMEN STUDENTS IN HIGHER EDUCATION

The literature seems to indicate that women students entering higher education have vague career plans, if any, and have unrealistic attitudes about the world of work. Ginzberg's (1951) pioneer work indicated that women do not choose college majors with any kind of vocational implication. Unfortunately, higher education offers few solutions for the problem. (Howe, 1975)

Not only do there appear to be few solutions in higher education, there also seems to be a number of barriers that women students must overcome. In the study conducted by Westervelt (1975) various institutional barriers in higher education were discussed. Some of the areas included were: admission practices such as sex quotas and age restrictions, financial aid practices, institutional regulations, housing policies, curriculum planning, student personnel

services and faculty/staff attitudes, behaviors, etc.

Title IX

Recent legislation has been enacted to deal with this problem (Title IX of the Educational Amendment, 1972) which mandates sex discrimination be eliminated in federally assisted education programs. Title IX has significant implications for a variety of issues including recruiting, admissions, financial aid, student rules and regulations, housing rules, health care and insurance benefits, student employment, textbooks and curriculum, single sex courses and women's studies program (Dunkle and Sandler, 1975).

Dunkle and Sandler (1975) report in reference to the Title IX application for counseling students that:

While there is little question that it is important for an institution to provide its students with unbiased counseling, there is considerable disagreement concerning how this might most appropriately be accomplished. Sex bias in counseling is perhaps even more difficult to identify and rectify than bias in textbooks or curricula. Because of the subtle nature of discrimination in this area, the government is even less likely to intervene in counseling programs than in the area of textbooks and curriculum.

Although counseling programs alone cannot take the blame or credit for career and personal choices students make, they typically mirror the attitudes of the institution towards women. Often sex bias is transmitted by well-meaning counselors who pass on stereotypes about men and women. They may be unaware of the growing body of research which is shedding new light on motivation and achievement of women. Often counselors are trained only to work with the "traditional" student, a label which often does not

apply to older women returning to complete their education or women with child care and family responsibilities.

No matter what stand HEW takes on direct (or indirect) intervention to alleviate sex bias in counseling, voluntary steps by schools would be consistent with both the spirit and letter of Title IX. For example, they might develop programs to train their counselors and other staff members to be more sensitive to their own biases and those in materials they use.

Counselors and Advisors

Adult women need to have career counseling available to them. They need clarification of their alternatives regarding employment, help in working out conflicts between home responsibilities and outside interests, assistance in developing an identity of their own, and help in increasing self-esteem (Morris and Mochiziki, 1972).

Persons working with women need to be able to see women as individuals, not as a class. Since the time of the Boverman, et.al., (1970) study, investigating the possible effects of sex-role stereotyping on mental health professionals, further research (Steward and Thomas 1971; Fakrekout, 1974; Brown and Hellinger, 1975; Unger, 1976) has confirmed the Boverman, et.al hypothesis: since people in general hold strong beliefs about sex appropriate behavior, we can assume that counselors also hold these notions.

Patterson (1973) states that women become encultured to the "female role" in society, counselors, male and female, are misinformed about women and the world of work, and still function with the same

stereotypes that others do. Vocational and guidance counselors do not deal with issues of sexual and vocational identity which has created much conflict within young women today. Counselors also do not assist women in being prepared and learning to deal with bias and discrimination as it exists in today's world.

Sex role stereotyping as it applies to helping professionals appears to be changing for the better.

Broverman, Broverman, Clarkson, Rosenkrantz and Vogel (1970), in a study conducted in the late 1960's investigated the possible effects of sex-role stereotyping by mental health professionals. The findings of the study showed no significant difference in the view of male and female clinicians; both subscribed to a double standard of healthy behavior for men and women.

Davis and Maslin (1975) disagreed with the Broverman study in that the males and females in this group differed on their expectation of healthy female behavior. This research indicates that female respondents expected a healthy female to be approximately the same as this sample's standard for healthy males, whereas male respondents expected a healthy female to be more stereotypically feminine than the standard for healthy males. The researchers suggest that the difference between male and female response lies in the feminist movement. Females among this sample had discontinued employing stereotypes in their image of healthy women due to exposure to new

information on women in our society.

In Brown and Hollinger study (1975) an investigation was made of therapist's attitudes toward women. An attitude toward women's questionnaire was administered to 177 therapists, psychiatrists, psychologists, social workers, and psychiatric nurses. The results of this study indicated that (1) women therapists hold more contemporary attitudes than male therapists; (2) males see themselves as losing their traditional position of dominance; (3) therapists with fewer years of experience leaned toward traditional views; and (4) females scored higher on contemporary views on items related to sex, child rearing, and maternal instincts.

A similar finding occurred in the Olesker and Balber (1972) study. It was their conclusion that female counselors seemed more empathetic with the needs of their women clients. Thomas and Steward (1971) and the Pietrofsk and Schlossberg (1972) study found that counselors favor women whose occupational aspirations conform to sexual stereotypes. Counselors attempt to discourage women aspiring to "male" occupations, either by actively discouraging them or ignoring their choices (Patterson 1973). Vetter, (1973) challenges the counseling profession by stating that since women are discriminated against in pursuit of education and careers, let them at least not be discriminated against by counselors whose job it is to help them

maximize their individual potential. Krovitz (1976) advocates weeding out counselors who are predisposed to stereotyping because this is out-of-date.

A group similar to counselors in their relationships with students are academic advisors. Gelwick (1974) suggests a major concern of both students and faculty is inadequate counseling. She indicates that lack of training for faculty advisors, limited time for and poor rewards are major factors in poor advising. If advising or counseling is biased with regards to women's choice of identity and role then it is likely to define and prescribe the client on a vicious circle in academic advising. Many advisors collude with male and female students by suggesting traditional "male" and "female" occupations avoiding exploration of non-traditional alternatives.

The Chronicle of Higher Education (April 5, 1976) suggests that male faculty in general are not in tune with issues affecting women students. An article in the Chronicle of Higher Education (January 24, 1977) based on an analysis of four institutions, also states that colleges are dominated by male professors who in general are "relatively" insensitive to issues affecting their women students and female colleagues.

The May issue (1976) of the Chronicle of Higher Education refers to the Todd-Lipset Survey that women faculty care more than men faculty about minority issues. It was reported that over one-half

the women compared to 42 percent of the men, strongly oppose any barriers related to sexual tendencies.

Need for Role Models

It seems women students need help in clarifying their alternatives regarding employment, help in working out conflicts between home responsibilities and outside interests, assistance in developing an identity of their own, and help in increasing their self-esteem.

One possible way in dealing with these conflicts is for women students to see and talk with women faculty who may have had similar conflicts in their lives.

The need for role models for women who have successfully combined home and work seem to be apparent in light of recent research (Almquist and Angrist, 1970, 1971; Rossi, 1971; Dickerson, 1974; Harris, 1970). Plotsky and Good (1974) found that an opportunity to discuss the conflicts of being a working women with older women was a valuable counseling experience for undergraduate students. Astin (1969) study found that women doctorates had been influenced in their decision to strive for a career by role models. Theodore (1971) suggests that role models and women professors support play a significant role in making of the professional woman.

Higher education, however, is comprised primarily of male faculty. The U.S. Department of Health, Education, and Welfare

indicates that women comprise 22.5 percent of faculty who hold professorships. The Carnegie Commission 1973 reports women represent 36 percent of the graduate students but only 19 percent of the faculty of four year colleges and universities.

In light of the expressed need for role models, higher education should possibly emphasize affirmative action programs and strive for innovative means of providing women students with the supports that male students receive.

In addition to this, Guttman (1973) challenges all professionals in higher education, particularly graduate school, to start listening to women students' needs and lead the way in developing new programs of career guidance that consider the changing role of women and the rapid increase of opportunities for women in the world of work.

Oliver (1975) also offers suggestions for persons in the helping professions which, of course, should apply to all members of the university community. (1) Be aware of the necessity for dealing with the bias issue in counseling - in yourself, in others and in the materials you use. (2) Emphasize career counseling for women within a life-planning context, taking into consideration the developmental stages involved. (3) Work with men, as well as women, in order that the men may understand the changes that are occurring and their role in helping both themselves and the women in their lives come to terms

with these changes. (4) Keep informed of the research and other literature pertaining to women.

Epstein's (1970) conclusion that women were not as apt to be included in the protege-sponsor relationship or in the colleague systems that often serve as vehicles for professional advancement, suggest that advisors, male and female, examine all available avenues that they may use to help women students receive equal assistance in this most important career developing aspect. Rice (1977) states that women lack a key preliminary step in going from the masters degree level to doctoral level study. She describes this as access to information about obtaining a higher degree and/or the financial aid necessary to do so. Such information, presented by sympathetic sponsors accompanied with encouragement is part and parcel of the protege process. Discussion of the ways and means, the keys, the concrete feedback, are all part of the rites of passage to the doctorate and to the profession.

RESEARCH: ATTITUDES TOWARD SEX ROLES

Early Research

One of the earlier studies involving the measurement of attitudes toward sex roles took place in 1936 by Kirkpatrick. A "Belief-Pattern Scale for Measuring Attitudes Toward Feminism" was developed and used by Kirkpatrick in several studies. In comparing attitudes of students

he found females to be less inconsistent than males, who more often accepted both feminist and antifeminist stands on the same issue. In a study which compared the attitudes of husbands and wives (Kirkpatrick 1939), he found that anti-feminist beliefs on the part of men were closely related to marital maladjustment, while women could hold highly feministic ideals without a disturbance in the adjustment of the marriage. Kirkpatrick (1936) also compared attitudes of university students with those of their parents. On the whole, the younger generation was more "liberal", but when educational differences were controlled, this generation difference disappeared. The younger generation also tended to show greater sex differences in attitude than their parents, indicating that the points of view of the sexes might be diverging over time.

Using an adaption of Kirkpatrick Attitude Scale, Seward (1945) undertook a study to assess the prevalence of liberal ideas among college sophomore women and to relate high liberal and low conservative scores to such factors as family background, scholastic aptitude test scores, masculinity-femininity scores, and attitude toward female biological functions.

Comparisons of extreme liberals and conservatives on the feminism scale indicated a less conforming and less secure home background among the liberals. Their mothers were more often perceived by them as poorly adjusted, more likely to have a career, and the

home was more likely to have been disrupted by death or divorce. It was also found that significantly more conservatives had brothers than liberals. Conservatives were also more likely to have religious backgrounds than liberals. No differences were found in scholastic aptitude scores, and both groups appeared to have a healthy acceptance of female biological functions.

Seward's study was undertaken near the end of World War II when women were needed in great numbers to keep the country going while the men were at war. Assessing the future employment desires of women was one of its purposes. Most of the sample of 147 women desired equality between men and single women, but expected to become the traditional subordinate wife and mother after marriage. This remained relatively unchanged until 1963 until the publishing of Betty Friedan's The Feminine Mystique.

Recent Research

Broverman, Broverman, Clarkson, Rosenkranz, and Vogel (1970) investigated the possible effects of sex-role stereotyping by mental health professionals. They surveyed 79 actively functioning clinically trained psychologists, psychiatrists and social workers, finding evidence of a double standard for mental health. The finding showed no significant difference in the views of male and female clinicians; both subscribed to a double standard of mental health

for the sexes. The clinicians' view of healthy males did not differ significantly from their conception of a healthy adult, however, their views of a healthy, mature woman did differ significantly from the healthy adult characteristics. The study demonstrated that these clinicians expect women to be more passive and dependent than men but that these traits are not considered ideal for mental health.

The attitudes of women were assessed in two large surveys by national magazines, Psychology Today and Redbook in 1973 (Tavris, 1972). The response to these two studies were 20,000 (Psychology Today) and 120,000 (Redbook). Women who favored the Women's Liberation Movement composed roughly 60 percent of the sample. Because the questionnaires were obviously directed toward a liberal point of view, it was highly likely that those interested in the women's movement would respond.

Both surveys indicated that the respondents believed in the cultural, rather than biological genesis of sex-linked traits as aggressiveness and emotionality. Redbook sample found an age difference, the older, married women tended to ascribe more sex-linked traits to biology than did the younger single women.

The Psychology Today study included males, inactive females, and active women liberation movement respondents. Tavris contrasted the three groups as follows; "Invariably men lagged far behind group

women in support of Women's Liberation issues. Non-group women sometimes fell closer to group members in attitudes and other times were more conservative than men." Many men gave lip service to the movement but admitted to having discriminated against women, and were perfectly satisfied by the traditional division of labor between the sexes. "Liberal political preference is a major indicator of support for Women's Liberation Movement. Religion has a similarly strong effect on attitudes, Protestant and Catholics are most traditional." Tavris came to a similar finding as Kirkpatrick that the most dissatisfied women were those who were trying to combine work with marriage to a traditional husband. The conclusion was that potentially the most active supporters of Women's Liberation would be these women and not the more traditional or the liberal women with liberal lifestyles.

Spence and Helmreich (1972) in a study designed to measure the attitudes of men and women students towards the likability of competent and incompetent females designed the Attitude Toward Women Scale (Appendix C). The 55 item scale was used by Spence and Helmreich in this study and a later study involving male and female students at the University of Texas in Austin. It has subsequently been used by a number of researchers examining sex roles in our society.

The Attitude Toward Women Scale contains 55 items with four response alternatives, being on the vocational, educational and intellectual roles of women, freedom and independence, dating, courtship and etiquette, sexual behavior and marital relationships and obligations. Two samples of male and female introductory psychology students (totaling 713 and 768 respectively) and a sample of 292 mothers and 232 fathers of these students were used in this study. It was found that the means of the female student were significantly higher than males, the means of mothers higher than fathers and students higher than parents.

The following year, 1973, Bingham and House constructed an attitude questionnaire which was used on secondary school counselors in New Jersey. The counselors in this study expressed more positive than negative attitudes toward women and work. In some respects their attitudes were less clearly defined than was expected. The conclusion was that women who do feel uncertain about their counselors might anticipate greater support on some important dimensions of vocational behavior from female rather than male counselors.

The Herman, Sedlacek Study (1973) utilized the Situational Attitude Scale for Women, an adaptation of the original Situational Attitude Scale developed by Sedlacek and Brooks in 1972. This scale was designed to measure attitudes of men toward women or more specifically toward women in non-traditional sex roles. It was

administered to 151 new freshmen during a summer orientation program. The responses to the scale did not immediately appear to measure sexism. A closer examination disclosed that sexism appears to be more than a negative reaction. The researchers described it as a stereotyped reaction to any change in the sex roles for either sex. The researchers believed in this respect that the SASW seemed to be a valuable tool for measuring elusive and complex attitudes.

Miller (1973) studied attitudes of 171 male sophomore students at five different college settings in the Northeast. The Rosenberg Self Esteem Scale (1965) was used to assess the subject's level of self-esteem. The Women's Liberation Questionnaire (WLQ) developed by Bove and Miller (1970) was utilized to assess attitudes toward the principles of women's rights and roles of women in present day American society.

The relationship between male attitudes toward women's rights and self-esteem of the male samples were examined, revealing that acceptance of principal issues related to the women's movement seemed to be significantly related to high levels of self-esteem in the samples of males studied. It was also found that males who attended large state and nonreligious affiliated institutions were generally more approving of the principles of women's liberation movement than males who attended small religious affiliated or private institutions. The non-college sample compared closely with the small religiously

affiliated or private college group.

In the Lunneborg study (1974) an attempt was made to provide validated evidence for Spence and Helmreich's Attitude Toward Women Scale conducted in 1972. It was the researchers intent to provide a standardized psychometrically sound instrument to be used in empirical studies on the psychology of sex differences and in conjunction with academic programs in women's studies with which psychologists are becoming more involved. The tests was administered to a new sophomore level class entitled Psychology of Sex Differences (Spring 1973) at the University of Washington. Eight-three (83) students volunteered for the pre-test, seventy-four (74) retook the test.

It was found, as in Spence and Helmreich's study, that males were less liberal than females before the women's studies course. After the course was completed the difference disappeared. The study found in comparing its results with the Spence and Helmreich Study that North-South differences for both men and women were significant while tests of differences in variance were not. In examining the sexes independently it was found that the women's scores were significantly higher after taking the Women's Studies Course; however, the men's scores were not. This lack of significance was attributed to the fact that only eighteen (18) men agreed to be retested. The author surmised that resistance to retesting was higher among the less liberal

men for whom the course content may have produced considerable dissonance.

According to the author, this scale demonstrated its utility as an assessment device for psychology courses in women's studies programs. It was also found that the scale is sensitive to changes in attitudes of subjects with an initially high level of liberalism.

Osmond and Martin (1975) devised the Osmond-Martin 32 item Sex-Role Attitude (SRA) Scale with five response categories to be used in their study. The questionnaire was given to undergraduate students selected by a stratified random sample of junior and senior-level classes at a large state-supported university in Florida. The sample was stratified according to one of the eight colleges or schools of the University. Thirty classes were selected by random sampling procedure with 28 participating. A total of 225 men and 255 women were chosen as subject for the study. The intention of the research was to highlight the differences in male and female sex-role attitudes at both ends of the sex-role continuum (modern and traditional).

In general, the results were as expected. More males than females gave a conservative response while more females than males gave a liberal response. The researchers indicate that the most significant finding revealed by their data analysis is the identification of the "nerve center" of sex roles. Their data indicated that

women will encounter strong resistance to sex role changes which involve the assumption of supervisory, decision making and leadership roles outside the family. The males in their sample seemed least willing to accept women in these roles, and the females appear equally insistent not only that women should occupy such positions but that they can perform in them equally as well as men can.

Elmore (1975) utilized 61 introductory women's studies students and 44 introductory psychology students as subjects for her study. The Attitude toward Feminist Issues Scale was given to both groups at the beginning of the classes and again at their conclusion three months later. The Women's Studies students responded with a more liberal feminist position than those students in the introductory psychology class. Women students responded with a more liberal position than men students.

Bowman and Nickerson (1975) utilized the Attitude Toward Women's Scale Alternative Forms, an adaption from the original Attitude Toward Women Scale by Spense and Helmreich (1972), to examine the effects of a short intervention training, (1-1/2 hour workshop) on changing attitudes toward women of thirty-four (34) counselors at Boston University. The results showed that counselor's attitudes became significantly more liberalized after the workshop and that these changes were retained at the time of follow-up one month later.

In Brown and Hellinger Study (1975) therapists attitudes toward women were again investigated. An attitude toward women questionnaire was administered to 177 therapist - psychologists, psychiatrists, social workers, and psychiatric nurses. The results of this survey indicated that (1) female therapists hold more contemporary attitudes than male therapists, (2) males see themselves as losing their traditional position of dominance, (3) therapists with fewer years of experience leaned toward more traditional views, (4) females scored higher on contemporary views on items related to sex, child rearing, and maternal instincts.

Davis and Maslin (1975) used the Broverman questionnaire on 90 counseling students, 45 male and 45 female, to determine their attitudes as related to sex role stereotypes. Males and females were about the same in their conceptions of the stereotyped characteristics of male and female, however, they differ in their expectations of characteristics of a healthy female. Female respondents expected a healthy female to be approximately the same as this sample's standard for healthy males and healthy adults. Males, on the other hand, expected the healthy female to be the stereotyped female image. The author surmised that the differences were due to the feminist movement. More women among this sample than men had had exposure to the new information generated by the movement, thus had discontinued employing stereotypes as it applies to women.

Valentine, Ellinger, and Williams (1975) hypothesized that women choosing traditionally feminine occupations are more conservative in their conceptions of the female role than women choosing traditionally masculine occupations. The sample consisted of graduate men and women at the University of Texas at Austin. The research instrument chosen for use in this study was the Attitude Toward Women Scale developed by Spence and Helmreich in 1972. It was found in this research that graduate women in the study were more non-traditional in their attitudes toward women's roles than were the men confirming their hypothesis.

The authors noted that the mean scores for both men and women in graduate school were higher than the corresponding scores of undergraduates as reported by Spence and Helmreich. They surmise that graduate schools may demand a relaxing of sex stereotyping and more equality in terms of competition and academic abilities, therefore encouraging a more non traditional attitude toward women's roles. A second and more likely explanation is that individuals who choose to go to graduate schools, particularly women more career oriented than the typical American woman, are more non traditional in their attitudes toward women's roles than those individuals who choose not to go to graduate school.

Women's attitudes toward their life styles was examined by a national survey, Market Opinion Research in 1975, contracted by

National Commission on the Observance of International Women's Year. The resulting report was based on interviews from a geographic stratified probability sample of 1,522 adult women in the United States in August and September of 1975.

Three distinct attitudes concerning life style emerged from the extensive survey. (1) Traditional outlook. (2) Balancing outlook and (3) expanding outlook.

The traditional outlook is characterized by women who believe that mothers who stay home can do a better job of providing a secure environment for their children than mothers employed outside the home can provide. Most of these women oppose efforts to change or strengthen women's status in society today.

Balancing outlook is one that is somewhere in the middle. These are women who believe that some things need to be changed and some things to remain as they are. Some in this group simply don't know whether they favor or oppose present moves toward changes.

Expanding outlook was defined as women's attitudes that they want to change. They favor all that is happening to improve women's status. They want lives which offer options of home, marriage, and careers outside the home in all possible combinations. They are not rejecting the homemaker role but want to combine it with employment whether they are married or single. If married, they view marriage as a relationship in which responsibilities for financial support and

child and home care are shared.

Whether a woman holds traditional or expanding attitudes varies with age, marital status, race, education, occupation and geographic area of the country.

Traditional outlook women are more apt to be over 45, married, homemakers most of their lives, and have less than high school educations. While those who are most traditional are more apt to have such characteristics, not all do. Seventeen percent of the women under 25 reflect the traditional outlook concept. Eighteen percent of college graduates are in the same category.

Characteristics found in greater proportions among expanding outlook women include these: under 35, and college graduates with professional occupations. More than twice as many young, educated women hold expanding outlook values as hold traditional viewpoints. But not all expanding outlook women are young. Twenty-one percent of those 45-6 also favor expanding roles for women.

Balancing outlook women are less distinguished by demographic characteristics. Large proportions of blacks, Spanish American women, and women over 65 comprise this group.

Charts illustrating the attitudes held by women throughout the United States utilizing these three classifications of attitudes on life styles and in conjunction with other demographic information are provided for the reader in Appendix L.

Another study utilizing the Attitude Toward Women Scale (Spence and Helmreich, 1972) was conducted in 1976 by Williams and King at California State University-Chico. It examined the attitude of women students in different curriculums. Seventy-four (74) junior and senior female students were tested by the AWS. It was found that women majoring in male dominated vocationally oriented fields have more liberal sexual role attitudes than women majoring in other fields.

Harris and Lucas (1976) using an instrument similar to the Broverman study, sampled 345 social work students. The hypothesis was stated that (a) the existence of a double standard of mental health for men, and (b) that male and female students would differ in their concept of mental health for women as the result of the women's movement. The researchers found no confirmation of the first hypothesis; however, the second was confirmed. The ratings by males in this study paralleled the stereotypes, with a healthy man rated closer to the masculine pole than was a healthy female. Female ratings on the other hand, showed a significant difference with healthy women rated closer to the masculine pole than a healthy male. This was the inverse of stereotyped conceptions. The study seemed to indicate that not only are sex role stereotypes changing but that a new definition of mental health is emerging,

one with more humane and flexible standards with fewer marked differences between men and women. The cause of such changes would be somewhat in question, however, as the "Women's Movement" is too general and most likely could not be tested.

Englehard, Jones and Stiggins (1976) conducted an analysis of the development of counselor attitudes about women's roles over a period of six years. The subjects were guidance counselors who were selected by random sampling procedures over a period of a three year interval. The results of the surveys given indicated a change in attitudes about the working mother's sex-role definition. The narrow or rigid definition was no longer considered to be appropriate by either male or female guidance counselors.

SUMMARY

The literature was reviewed in this chapter regarding the perceived disparity in employment, education and earnings between sexes. Various points of view were cited suggesting possible causation. Implications of the overall effect on males and females were discussed by various authors. The dynamics of sex bias and sex role stereotyping as applied to both males and females in this society was explored from different viewpoints. What is being done to equalize opportunities for males and females particularly in higher education and what problems continue to exist are questions that were addressed in this review of literature.

Chapter 3

PROCEDURES

INTRODUCTION

In the Spring of 1977 a Health, Education and Welfare Grant in the amount of \$30,000 was awarded Montana State University for the funding of a comprehensive research project for the duration of the 1977-78 school year. This project was undertaken by the Office of Student Affairs, administered by Dr. Peggy Leiterman-Stock, Assistant Dean of Students.

The project was two-fold. One segment of the research dealt with examining the effects of training designed to increase self-awareness of students through the use of a career/life planning workshop series. As a part of the design, the training included examination of sexual bias and sex role stereotyping as it applies to vocational choice.

The parallel study, which was the focus of this investigator's study, was to conduct research on a preliminary level to determine if there is a difference in attitudes and behavior of Heads of Departments at Montana State University after participating in training designed to reduce sex bias and sex role stereotyping as compared to a similar group not receiving this treatment. Chapter 3 examines the procedures used in this study and includes the following areas:

- A. Population Description and Sampling Procedure.
- B. Investigation and Treatment Procedures.
- C. Methods of Collecting Data.
- D. Methods of Organizing Data.
- E. Statistical Hypothesis.
- F. Analysis of the Data.
- G. Precautions taken for accuracy.
- H. Summary.

POPULATION DESCRIPTION AND SAMPLING PROCEDURE

The population for this study consisted of forty-nine Heads of Departments including Directors and Coordinators of Programs at Montana State University. Also included in the study were counseling personnel from the University Counseling Service. Twenty-seven (27) persons were included in the experimental group and twenty-two (22) persons in the control. Of the experimental group, eighteen (18) were male, nine (9) female. The control group consisted of sixteen (16) males and six (6) females. Most of the participants were Heads of Departments or persons designated as chief administrative personnel for University programs. Most of the Departments at Montana State University were represented.

Each academic and non-academic department of the M.S.U. campus

was contacted to ascertain the identity of persons within the departments who were considered official and unofficial administrative personnel. Counseling staff from the University Counseling Service were included in this study. Although their administrative responsibilities are limited, the positions they hold afford considerable influence and power within the university structure with regards to career explanation and career choice, thus meeting the criteria of selection for this study. Volunteers for the project were requested. Those individuals who volunteered were divided into two groups, experimental and control, utilizing a stratified random sampling technique. Control over two factors was exercised in the sampling procedure: the sex of the individuals the College which they represented. The sex of the Department Heads and the departments which were represented in this study are listed on pages 90 and 91.

INVESTIGATION AND TREATMENT PROCEDURE

Two areas were examined in this study: (A) Measurement of attitude change of the Head of Departments through the use of a validated instrument administered to both groups prior to the treatment, following the first intervention training and again upon completion of the experiment. (B) Measurement of behavior change in Heads of Departments through the use of an Advisor-Student Rating Scale (Appendix D.) developed by the investigator, administered following the completion

of the intervention training.

The "treatment" in this study utilized to affect change, employed the use of an intervention training for Heads of Departments in the experimental group. This training consisted of two workshop retreats.

The overall objectives of the project dealing with Heads of Departments were as follows:

1. To reduce sexual bias and stereotyping in Heads of Departments participating in the project.
2. To reduce unconscious sexist behavior of Department Heads in the advisory function.
3. To increase exploration of non-traditional career options initiated by Department Heads during advisor-student conferences.

The first workshop was conducted by Dr. Rosabeth Moss Kantor, Yale Professor, and her associate, Dr. Barry Stein. These individuals were chosen by the research team for their outstanding credentials as consultants and academicians in this field. (See Appendix M.) Their vitas, which demonstrated a large number of publications and presentations pertinent to the subject to be explored at Montana State University, were distributed to the Department Heads to encourage support and cooperation. Approximately 50 percent of the target group responded affirmatively to the project.

The second workshop was conducted by Dr. Lynda Brown, Affirmative Action and Personnel Officer at University of Montana in Missoula, Montana. Fulfilling the objectives of the project, the design of this

workshop expanded into new areas meaningful to all participants.

DESIGN, FORMAT AND CONTENT OF WORKSHOPS

The training, which served as an intervention for this project consisted of two workshop retreats for Heads of Departments in the experimental group. The first of these workshops was held at a popular resort area in Southwestern Montana and involved an overnight stay for the participants. The second workshop took place five months later in an off-campus site within a short driving distance from the University.

The following paragraphs will describe in summary the design and format of the workshops. More detailed information including the content of major sessions and any other significant aspects of the workshops pertainment to this investigation may be found in Appendices P and S.

Workshop I (Summary)

The first of these workshops consisted of eleven (11) hours of training and utilized two outside consultants. An off-campus retreat site was chosen for this workshop and required an overnight stay for the participants.

A combination of lectures, large group participation, small group interaction and individual question and answer sessions comprised the format and approach to this learning experience.

Four major sessions took place at this workshop:

1. Lecturette on the topic of "Organizational Renewal".
2. Future projections (10 to 20 years from the present).
3. Modes of Communication - male/female.
4. Role play exercise.

The topics ranged from information and theory - about the "whys" of discrimination and bias in organizations; about how each of us experiences and perpetuates our socialization process; to topics pertinent to the role of being an administrator and educator at Montana State University. See Appendix P.

Workshop II (Summary)

The second workshop was again conducted by an outside consultant. The workshop was seven (7) hours in length and was designed to follow-up and expand into areas of interest to the participants and appropriate to the objectives of the project.

This workshop took place within a short driving distance to the University and required participants to be present throughout the days activities.

The workshop was designed to be more group oriented than the first workshop. A series of exercises took place with expectation that much group interaction would result.

Five major activities took place at this workshop:

1. "I wish exercise".

2. Career choice activity.
3. Advisor exercise.
4. Job sharing proposal.
5. Strategy for change.

The topics of this workshop ranged from an exchange of ideas on what life would have been like as a member of the opposite sex, including what other career choices one might have made; an examination of one bias in dealing with students as advisors; flexible working situations allowing persons to exercise choice and what the participants could do to enlighten and facilitate change where needed at Montana State University. See Appendix S.

METHOD OF COLLECTING DATA

For the purpose of this investigation two instruments were utilized to examine changes in attitudes and behavior; the Attitude Toward Women Scale and the Advisor-Student Rating Scale. A third measurement, in the form of a Workshop Evaluation, was used to assess perceptions of how the participants viewed the training sessions.

The Attitude Toward Women Scale (AWS) was administered to Heads of Departments in both experimental and control groups. The research design employed a traditional pre-post-testing procedure. The investigator administered the Attitude Index prior to the

intervention training, after the first training session and utilized a second post-test upon completion of the experiment. The use of two post-tests afforded the opportunity for examination of the results of each of the two workshops.

An Advisor Student Rating Scale (Appendix E) was also developed by the investigator to examine changes in behavior of the participants in the study. Students participating in the parallel study were asked to rate the heads of departments on various factors after conferring with them in an advising conference.

Following identification of potential participants, volunteers were solicited for the research project. Those individuals who subsequently volunteered were divided into two groups - experimental and control - utilizing a stratified random sampling technique. Control over two factors were exercised in the sampling procedure: one, the sex of the individual and two, the college which they represented. Verification of the similarity in composition of the two groups was obtained through the findings of scores on the attitude index pre-test. The groups to which the individuals were assigned were not disclosed, however, until following the pre-test. A code (A or B) was utilized to identify the group designation. Therefore, no person knew whether or not he/she were in the experimental or control group at the time of the initial testing. A letter was sent by the investigator following

the pre-test informing the participants of the group to which they were assigned.

It was decided that the sensitivity of the subject matter and the prominence of the University staff involved in the project demanded that strict confidentiality be maintained in the use and analysis of the attitude index as well as the advisor-student rating scale. Testing materials were identified by a code which only the participant could interpret as their own. The code, however, could be and was used to match the pre-test and post-test materials. Demographic information was also limited to sex and age only to further assure participants of anonymity. The concern was not only to avoid identification of individuals in the study for ethical reasons but also to avoid any appearance that any effort was being made to reveal the participant's identity. It was hoped that this would help to solicit candid responses to the questions they were asked.

McLean and Loree (1977) found that in their survey of faculty's attitudes toward a Career Development Program at the University of Alabama, significant difference of response to questionnaires was obtained when professors were asked to identify the department of which they were associated. They concluded that faculty members need to remain anonymous and that this was possibly due to suspicion that the results may be used for other than stated purposes. For this

reason demographic information in this study was kept to a minimum.

Testing sessions for the control and experimental groups were scheduled on the same days and same location with the groups being intermixed with the intention of maintaining similar testing conditions. The first post-test, however, sustained problems in that a number of persons from both the experimental and control groups did not show for the testing sessions which necessitated individual follow-up testing. The second post-test was structured in a different fashion, hoping to control for this difficulty. However, out of necessity it required testing sessions to be scheduled under somewhat dissimilar conditions. The experimental group was tested at the second workshop following the training at the termination of the workshop, while the control group was scheduled for a testing period a few days prior to the date of the workshop. Due to extremely poor response, two subsequent days of testing were set for those who failed to show for the earlier established sessions. A concerted effort was made by the researcher to have all the participants tested. Numerous telephone calls, messages and personal contacts reminding and persuading these individuals were required to finally complete the post-test.

Workshop evaluations were developed by the investigator and administered at the end of each of the two workshop retreats. Heads of departments in the experimental groups were asked to candidly

appraise the content, design and implementation of the workshops, including evaluating of the consultants. Participants were asked only to indicate whether they were male or female rather than state their name or department. (Appendices N and Q.)

The Advisor-Student Rating Scale (Appendix E) was provided to students in the parallel study during the winter and spring quarters of 1978 to rate department heads in the study on various perceived attitude and behavioral factors after conferring with them in an advising conference. Graduate students and faculty, acting as facilitators of the Career/Life Planning Workshops for these students, supervised the use of the instrument with members of their particular groups. Facilitators were asked to caution the students not to disclose the use of these rating scales at the time of the conference. They were instructed to complete the instrument following their meeting with the faculty member and return the instrument to the facilitator at the next group meeting. Confidentiality was stressed to insure anonymity of the students and the department heads.

INSTRUMENTATION

The Attitude Toward Women Scale (AWS) (Appendix C) was chosen for use in this research partly because of its wide usage in the number of recently conducted studies and, of course, because of the focus of the instrument. Other tests available were examined but

none found that appeared to adequately measure attitudes toward women in contemporary society as the Attitude Toward Women Scale.

Development of the Attitude Toward Women Scale (AWS) was undertaken by Janet T. Spence and Robert Helmreich in 1972 to measure attitudes toward the proper roles of women in today's society. A number of revisions took place until the present fifty-five item scale emerged. Each of the items on the scale contains a declarative statement for which there are four response alternatives: Agree strongly, Agree mildly, Disagree mildly, Disagree strongly. Each item is given a score from 1 to 4 with 1 being the most traditional, conservative attitude and 4 the most liberal attitude. Since the statement contained in some of the items is conservative in content and in others is liberal, the specific alternative (Agree strongly or Disagree strongly) given a 1 score varies from item to item. Each subject's score is obtained by summing the values for the individual item, the range of possible scores thus going from 55 to 220.

The 55 items on the AWS are categorized into six according to content. The categories and the number of factor items in each are as follows: (1) Vocational, educational, and intellectual roles (N=17); (2) Freedom and independence (N=4); (3) Dating, courtship, and etiquette (N=7); (4) Drinking, swearing and dirty jokes (N=3); (5) Sexual behavior (N=7); and (6) Marital relationships and obligations (N=17) (Spence, Helmreich and Stapp, 1973).

Validation and cross validation were accomplished by Spence and Helmreich through use of the instrument with male and female students in the fall semester and again in the spring semester of 1972. Factor loadings were identified for each item through this analysis. (See Appendix C.) Reliability was also determined by comparison of the similarity of the distribution of subjects for these two semesters.

Because of the use of the Attitude Toward Women Scale with graduate students, parents and counselors, it follows that an indication of possible suitability for a group such as heads of departments at Montana State University exists. For this reason, the AWS was chosen as the primary instrument for use in this investigation to examine attitude change.

Advisor-Student Rating Scale

The development of an Advisor-Student Rating Scale (Appendix F) was undertaken by this investigator after a search of the literature revealed a scarcity of suitable measurement instruments available to examine faculty behavior in the advising situation. Questions concerning verbal responses, non-verbal behavior and students' perceptions were compiled from the literature and from a brainstorming session of the research team (see Appendix N). The research team was comprised of the Project Director, a research advisor and this

student investigator. Items were selected from this large pool of questions according to what seemed to best ascertain differences in behaviors as a result of conscious and unconscious sex bias. After selection of the items under the forementioned criteris, further elimination of items occurred due to redundancy in content. The choice of these items was preliminary in nature and it was assumed that thorough examination must be made before concluding that they do, in fact, distinguish such behavior.

It was determined that this rating scale would be designed and used as an exploratory instrument for this study.

The rating scale at this stage underwent further scrutiny by two additional experts in the field outside the project's research team. They included the Dean and an assistant professor from the College of Education. Again elimination and alteration of items resulted. New items were added that seemed appropriate. The instrument remained a preliminary measurement device in nature and it was felt that it should be limited to a process of "looking for patterns" in its use with subjects in this study. Therefore, at the onset, no specific anticipated outcome was determined.

The final version of the Advisor-Student Rating Scale contains 38 items including an optional comment section. The format of the Advisor-Student Rating Scale includes short answer, yes and no questions, and items whereby the student may select one of four response

alternatives in a Likert-like rating scale. Most of the questions fall in this last category. The responses for these questions from which students were asked to select one included: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). Demographic information requested included the student's name, age, sex, curriculum, and the name and sex of the faculty member.

The Advisor-Student Rating Scale was presented in rough form to students in the parallel study during the winter quarter 1977-1978 to rate faculty members on various factors after conferring with them in an advising conference. The students were also asked to critically examine the rating scale itself in order to improve its content. Following the use of Rating Scale, students offered suggestions to the researcher which were later incorporated into the final version. Comparisons of the results of the rating scale were also made of various combinations of male/female faculty to male/female students to ascertain possible trends.

The revised Advisor-Student Rating Scale was employed the spring quarter 1978 again with the students participating in the parallel study from the Career/Life Planning Workshop Series. The instructions were to choose and interview two faculty members of their choice from two lists of experimental and control subjects designated by the letter A or B. Upon completion of the interview, the students were asked to

fill out the rating form and return it to their group leaders at the next week's group meeting. The researcher explained to all the students the need and purpose of the instrument, how it was to be used and the confidentiality required. They were cautioned not to disclose the use or content of the rating scale to avoid contamination of the results. Students were assured of confidentiality in the use of the rating scale. They were also advised that if they preferred additional anonymity, they need only designate their sex and the sex of the faculty member, eliminating the use of names. Control and experimental group designation in this case would come from students identifying the list from which they selected the faculty member, either an A or B. The two lists were marked A or B, avoiding unnecessary disclosure to the students of the groups to which the faculty members were assigned. Other directions such as how to set up interviews were to be discussed in the small groups.

Although this rating scale was developed for research purposes, the interviews were also developed for the students' benefit. Exploration of various curriculums/careers, learning the process of inquiry and development of interview techniques were encouraged. Students were prompted to use this experience to their best advantage.

Upon receiving the completed Advisor-Student Rating Scale forms from students in the winter quarter Career/Life Planning Workshop

Series, additional feedback was solicited from students and group leaders.

The Advisor-Student Rating Scale obtained during winter and spring quarters (1977-78) were as follows:

Winter quarter. Eleven (11) rating scales for the experimental group, thirteen (13) for the control group. A total of twenty-four (24) received.

Spring quarter. Twenty-one (21) rating scales for the experimental group, seventeen (17) for the control group. A total of thirty-eight (38) received. One was eliminated due to a lack of designation of control or experimental group on the form.

The total for both quarters were thirty-two (32) Advisor-Student Rating Scales for the experimental group and thirty (30) for the control group.

METHOD OF ORGANIZING DATA

Data resulting from the assessment instruments was compiled, analyzed and tables for comparison and interpretation among and between the groups studies.

STATISTICAL HYPOTHESIS:

Null Hypothesis 1: There are no significant differences between the scores of the experimental and control groups as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 2: There are no significant differences among the scores of the three age groups as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 3: There are no significant differences between the scores of the male and female groups as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 4: There is no significant difference between the scores of the experimental and control groups on the factor of vocational, educational and intellectual roles as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 5: There is no significant difference between the scores of the experimental and control groups on the factor of freedom and independence as measured by the AWS with the pre-test as a covariate.

Null Hypotheses 6: There is no significant difference between the scores of the experimental and control groups on the factor of dating, etiquette and courtship as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 7: There is no significant difference between the scores of the experimental and control groups on the factor of drinking,

swearing and jokes as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 8: There is no significant difference between the scores of the experimental and control groups on the factor of sexual behavior as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 9: There is no significant difference between the scores of the experimental and control groups on the factor of marital relationships and obligations as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 10: There is no significant difference among the scores of the three age groups on the factor of vocational, educational and intellectual roles as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 11: There is no significant difference among the scores of the three age groups on the factor of freedom and independence as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 12: There is no significant difference among the scores of the three age groups on the factor of dating, etiquette and courtship as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 13: There is no significant difference among the scores of the three age groups on the factor of drinking, swearing and jokes as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 14: There is no significant difference among the scores of the three age groups on the factor of sexual behavior as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 15: There is no significant difference among the scores of the three age groups on the factor of marital relationships and obligations as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 16: There is no significant difference between the scores of the male and female groups on the factor of vocational, educational and intellectual roles as measured by the AWS with the pre-test as the covariate.

Null Hypotheses 17: There is no significant difference between the scores of the male and female groups on the factor of freedom and independence as measured by the AWS with the pre-test as a covariate.

Null Hypotheses 18: There is no significant difference between the scores of the male and female groups on the factor of dating, etiquette and courtship as measured by the AWS with the pre-test as a covariate.

Null Hypotheses 19: There is no significant difference between the scores of the male and female groups on the factor of drinking, swearing and jokes as measured by the AWS with the pre-test as a covariate.

Null Hypotheses 20: There is no significant difference between the scores of the male and female groups on the factor of sexual behavior as measured by the AWS with the pre-test as a covariate.

Null Hypotheses 21: There is no significant difference between the scores of the male and female groups on the factor of marital relationships and obligations as measured by the AWS with the pre-test as the covariate.

ANALYSIS OF DATA

The collected data for the investigation which was dependent on composite scores of the six factors of the Attitude Toward Women Scale were treated by computing an analysis of covariance with pre-test scores as the covariate.

Data from the investigation was treated at the .05 level of confidence. The investigator was of the opinion that for this investigation a type I error, rejecting a true null hypothesis would be less serious than to commit a type II error retaining a false null hypothesis. Stating a change had occurred when in fact it had

not, would be of less importance than not recognizing a change when it actually did occur.

PRECAUTIONS TAKEN FOR ACCURACY

Hand calculators and the University Computer System were used for statistical computations to insure maximum accuracy in analyzing the data.

SUMMARY OF CHAPTER

Participants in this study were Heads of Departments at Montana State University. The treatment administered to the experimental group was an intervention strategy of two workshops designed to reduce sex bias and sex role stereotyping and effect changes in behavior in the advising function. The Attitude Toward Women Scale, the Advisor-Student Rating Scale and workshop evaluations were utilized to measure and examine attitude and behavior to assess the treatment employed.

Twenty-one (21) hypothesis were postulated as a means to determine the extent of change with special emphasis on the six factors of the Attitude Scale. Statistical methods were delineated to evaluate the treatment procedures of the investigation.

Chapter 4

ANALYSIS AND DISCUSSION

Heads of Departments from Montana State University, Bozeman, Montana who volunteered to participate in the Project were randomly placed in two groups, experimental and control.

Table 1, Participant Population

Experimental Group:		Control Group:	
Curriculum	Sex	Curriculum	Sex
Agriculture	M	Art	M
Nursing	F	Student Affairs	F
English	M	Biology	M
Registrar	F	Speech	M
Biology (Wild Life Mgmt)	M	Microbiology	M
Military Science	M	English	M
Focus on Women	F	Educational Services	M
Biology	M	Educational Services	M
Business	M	Speech	M
Women's Athletics	F	Personnel Services	M
Engineering	M	Home Ec (Family Relations)	M
History & Philosophy	M	Biology	M
Political Science	F	Biology	M
Physiology	M	Testing and Counseling	M

Table 1., Continued:

Experimental Group:		Control Group:	
Curriculum	Sex	Curriculum	Sex
Psychology	M	Home Economics	F
Business	M	Sociology	M
Educational Services	F	Focus on Women	F
Home Economics	F	Business	M
Biology	M	Secondary Education	M
Architecture	M	Nursing	F
Physical Education	M	Nursing	F
Educational Services	M	Nursing	F
Nursing	F		
Aerospace Studies	M		
General Studies	F		
Mathematics	M		
Human Development Specialist	M		
TOTAL	27	TOTAL	22

All Heads of Departments were tested by two instruments, The Advisor-Student Rating Scale, developed by this investigator and the validated instrument, Attitude Toward Women Scale. In addition to this data, "Treatment" evaluations were completed by those in the

experimental group.

The Attitude Toward Women Scale was administered to both groups prior to the intervention (the pre-test), and two post-tests were administered following each of the two workshops (Second and Third Testing).

The Advisor-Student Rating Scale was completed by a group of Montana State University students after they had conferred with participants in this investigation in an advising session. The scale was utilized two quarters, Fall 1977 and Spring 1978 and provides data on behavior of advisors in the advising function.

The following six factors derived by score loading from the Attitude Toward Women Scale were examined in this investigation by an analysis of covariance with the pre-test as the covariate.

- I. Vocational, Educational and Intellectual Roles
- II. Freedom and Independence
- III. Dating, Courtship and Etiquette
- IV. Drinking, Swearing and Dirty Jokes
- V. Sexual Behavior
- VI. Marital Relationships and Obligations

This test analyzed the following differences: (A) differences between experimental and control groups; (B) differences among age groups; and (C) differences between male and female. The data obtained from this analysis was used to test the hypothesis at the .05 level of

significance.

Five cases due to incomplete data were eliminated from analysis, leaving twenty-four (24) in the experimental group; seventeen (17) of which were male and seven (7) female. The control group had a total of twenty-two (22) with sixteen (16) males and six (6) females.

Null Hypotheses 1: There are no significant differences between the scores of the experimental and control groups as measured by the AWS with the pre-test as the covariate.

Table 2 presents the analysis of covariance results between the experimental and control groups on the second testing of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 2. Analysis of Covariance between Experimental and Control on the Second Testing of all Factors with the Pre-test as the Covariate.

	N	Pretest	2nd Testing	Adjusted Means	Variance
Control	22	182.00	179.72	179.56	3.364
Experimental	24	181.00	181.70	181.86	3.084
F = .800	D.F. 1 and 43				

Table 3 presents the analysis of covariance results between the experimental and control groups on the third testing as measured by the AWS with the pre-test as the covariate.

Table 3. Analysis of Covariance between Experimental and Control on the Third Testing of all Factors with Pre-test as the Covariate.

	N	Pretest	3rd Testing	Adjusted Means	Variance
Control	22	182.00	184.27	184.14	10.901
Experimental	24	181.66	175.29	175.41	9.992
F = 3.65	D.F. 1 and 43				

Since the computed F value of .800 for the second testing and the computed F value 3.65 for the third testing are not greater than the critical F value of 4.08, the null hypothesis that there is no significant difference between the scores of the experimental and control groups of the AWS with the pre-test as the covariate, was not rejected.

Null Hypothesis 2. There are no significant differences among the scores of the three age groups as measured by the AWS with the pre-test as the covariate.

Table 4 presents the analysis of covariance results among the three age groups identified, on the second testing of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 4. Analysis of Covariance Among the Three Age Groups on the Second Testing of All Factors with Pre-test as the Covariate

Age	N	Pretest Mean	2nd Testing	Adjusted Mean	Variance
29-39	13	190.46	190.23	182.10	6.098
40-49	22	177.59	175.45	179.43	3.502
50 & Above	11	180.09	180.18	181.46	6.877

F = .463 D.F. 1 and 43

Table 5. Analysis of Covariance among the Three Age Groups on the Third Testing of All Factors with Pre-test as the Covariate

Age	N	Pretest Mean	3rd Testing	Adjusted Mean	Variance
29-39	13	190.96	189.76	183.50	20.78
40-49	22	177.59	176.27	179.34	11.93
50 & above	11	180.09	174.18	175.43	23.44

F = .731 D.F. 1 and 43

Table 5 presents the analysis of covariance results among the three age groups identified, on the third testing of the Attitude Toward Women Scale with the pre-test as the covariate.

Since the computed F value of .463 for the second testing and the computed F value .731 for the third testing was not greater than the critical F value of 4.08, the null hypothesis that there is no

difference among the scores of the three age groups as measured by the AWS with the pre-test as the covariate, was not rejected.

Null Hypothesis 3. There are no significant differences between the scores of the male and female groups as measured by the AWS with the pre-test as the covariate.

Table 6 presents the analysis of covariance results between male and female groups on the second testing of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 6., Analysis of Covariance Between Male and Female on the Second Testing of All Factors with Pre-test as the Covariate

	N	Pretest Mean	2nd Testing	Adjusted Mean	Variance
Male	33	176.75	174.42	179.00	2.164
Female	13	194.69	196.84	185.22	5.875

F = 4.548* D.F. 1 and 43

* Significant < .05

Table 7 presents the analysis of covariance results between the male and female groups on the third testing of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 7: Analysis of Covariance between Male and Female on the Third Testing of All Factors with the Pre-test as the Covariate

	N	Pretest Mean	3rd Testing	Adjusted Mean	Variance
Male	33	176.75	173.18	176.55	7.576
Female	13	194.69	195.84	187.29	20.570
F = 3.866 D.F. 1 and 43					

Since the computed F value of 4.548 for the second testing was greater than the critical F value 4.08, the null hypothesis that there is no significant difference between the second scores of the male and female groups as measured by the AWS with the pre-test as the covariate, was rejected.

Since the computed value of 3.866 was not greater than the critical F value 4.08, the null hypothesis that there is no significant difference between the third testing scores of male and female groups as measured by the AWS with the pre-test as the covariate, was not rejected.

EXPERIMENTAL AND CONTROL

Null Hypothesis 4. There is no significant difference between the scores of the experimental and control groups on the factor of the vocational, educational and intellectual roles as measured by the AWS with the pre-test as the covariate.

Table 8 presents the analysis of covariance results between the experimental and control group on the second testing of Factor I, Vocational, Educational and Intellectual Roles, of the Attitude Toward Women Scale with the pre-test as a covariate.

Table 8. Analysis of Covariance Between Experimental and Control Groups on the Second Testing of Factor I, Vocational, Educational and Intellectual Roles, with Pre-test as the Covariate

	N	Pretest Mean	2nd Testing	Adjusted Mean	Variance
Control	22	61.40	61.04	66.95	.498
Experimental	24	61.20	61.20	61.29	.456

F = .121

D.F. 1 and 43

Table 9 presents the analysis of covariance results between the experimental and control group on the third testing of Factor I, Vocational, Education and Intellectual Roles, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 9. Analysis of Covariance Between Experimental and Control on the Third Testing of Factor I, Vocational, Educational and Intellectual Roles with Pre-test as the Covariate

	N	Pretest Mean	3rd Testing	Adjusted Mean	Variance
Control	22	61.40	62.40	62.35	1.342
Experimental	24	61.20	59.29	59.34	1.230

F = 3.512 D.F. 1 and 43

Since the computed F value of .121 for second testing and the computed F value 3.512 for the third testing was not greater than the critical F value of 4.08, the null hypothesis, that there is no significant difference between the scores on the experimental and control groups on the factor of vocational, educational and intellectual roles as measured by the AWS with the pre-test as the covariate, was not rejected.

Null Hypothesis 5. There is no significant difference between the scores of the experimental and control groups on the factor of freedom and independence as measured by the AWS with the pre-test as the covariate.

Table 10 presents the analysis of covariance results between the experimental and control group on the second testing of Factor II, Freedom and Independence, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 10. Analysis of Covariance Between Experimental and Control on the Second Testing of Factor II, Freedom and Independence, with Pre-test as the covariate

	N	Pretest Mean	2nd Testing	Adjusted Mean	Variance
Control	22	12.40	12.77	13.10	.131
Experimental	24	13.41	13.16	12.85	.120
F = .240	D.F. 1 and 43				

Table 11 presents the analysis of covariance results between the experimental and control group on the third testing of Factor II, Freedom and Independence, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 11. Analysis of Covariance Between Experimental and Control on the Third Testing of Factor II, Freedom and Independence, with Pre-test as the Covariate

	N	Pretest Mean	2nd Testing	Adjusted Mean	Variance
Control	22	12.40	12.77	13.10	.180
Experimental	24	13.41	12.66	12.36	.165
F = 1.55	D.F. 1 and 43				

Since the computed F value of .240 for the second testing and the computed F value, 1.55, for the third testing was not greater than the critical F value of 4.08, the null hypothesis, that there is no significant difference between scores of the experimental and control

groups on the factor of freedom and independence as measured by the AWS with pre-test as the covariate was not rejected.

Null Hypothesis 6. There is no significant difference between scores of the experimental and control groups on the factor of dating, etiquette and courtship as measured by the AWS with the pre-test as the covariate.

Table 12 presents the analysis of covariance results between the experimental and control group on the second testing of Factor III, Dating, Courtship and Etiquette, of the Attitude Toward Women Scale, with the pre-test as the covariate.

Table 12. Analysis of Covariance Between Experimental and Control on the Second Testing of Factor III, Dating, Courtship and Etiquette, with Pre-test as the Covariate

	N	Pretest Mean	2nd Testing	Adjusted Mean	Variance
Control	22	20.72	20.63	20.50	.212
Experimental	24	20.37	20.66	20.78	.194

F = .194 D.F. 1 and 43

Table 13 presents the analysis of covariance results between the experimental and control group on the third testing of Factor III, Dating, Courtship and Etiquette, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 13. Analysis of Covariance Between Experimental and Control on the Third Testing of Factor III, Dating, Courtship and Etiquette with Pre-test as the Covariate

	N	Pretest Mean	3rd Testing	Adjusted Mean	Variance
Control	22	20.72	20.95	20.82	.317
Experimental	24	20.37	19.79	19.91	.291
F = 1.364	D.F. 1 and 43				

Since the computed F value of .194 for the second testing and the computed F value 1.364 for the third testing was not greater than the critical F value of 4.08, the null hypothesis that there is no significant difference between scores on the experimental and control groups on the factor of dating, etiquette and courtship as measured by the AWS with the pre-test as the covariate, was not rejected.

Null Hypothesis 7. There is no significance between the scores of the experimental and control groups on the factor of drinking, swearing and jokes as measured by the AWS with the pre-test as the covariate.

Table 14 presents the analysis of covariance results between the experimental and control group on the second testing of Factor IV, Drinking, Swearing and Dirty Jokes, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 14. Analysis of Covariance Between Experimental and Control on the Second Testing of Factor IV, Drinking, Swearing and Dirty Jokes, with Pre-test as the Covariate

	N	Pretest Mean	2nd Testing	Adjusted Mean	Variance
Control	22	10.00	9.36	9.26	.134
Experimental	24	9.75	9.54	9.63	.123

F = .522 D.F. 1 and 43

Table 15 presents the analysis of covariance results between the experimental and control groups on the third testing of Factor IV, Drinking, Swearing and Dirty Jokes, of the Attitude Toward Women Scale, with the pre-test as the covariate.

Table 15. Analysis of Covariance Between Experimental and Control on the Third Testing of Factor IV, Drinking, Swearing and Dirty Jokes, with Pre-test as the Covariate

	N	Pretest Mean	3rd Testing	Adjusted Mean	Variance
Control	22	10.00	9.90	9.86	.175
Experimental	24	9.75	9.54	9.58	.160

F = .236 D.F. 1 and 43

Since the computed F value of .522 for the second testing and the computed F value, .236, for the third testing was not greater than the critical F value of 4.08, the null hypothesis, that there is no

significant difference between scores on the experimental and control groups on the factor of drinking, swearing, and jokes as measured by the AWS, with the pre-test as the covariate, was not rejected.

Null Hypothesis 8. There is no significant difference between the scores on the experimental and control groups on the factor of sexual behavior as measured by the AWS with the pre-test as the covariate.

Table 16 presents the analysis of covariance results between the experimental and control group on the second testing of Factor V, Sexual Behavior, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 16. Analysis of Covariance Between Experimental and Control on the Second Testing of Factor V, Sexual Behavior, with Pre-test as the Covariate

	N	Pretest Mean	2nd Testing	Adjusted Mean	Variance
Control	22	17.50	17.45	17.93	.150
Experimental	24	18.54	17.83	17.83	.137

F = 1.039 D. F. 1 and 43

Table 17 presents the analysis of covariance results between the experimental and control group on the third testing of Factor V, Sexual Behavior, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 17. Analysis of Covariance Between Experimental and Control on the Third Testing of Factor V, Sexual Behavior, with Pre-test as the Covariate

	N	Pretest Mean	3rd Testing	Adjusted Mean	Variance
Control	22	17.50	17.77	18.20	.311
Experimental	24	18.54	17.62	17.22	.285

$F = 1.611$ D.F. 1 and 43

Since the computed F value of 1.039 for the second testing and the computed F value, 1.611 for the third testing was not greater than the critical F value of 4.08, the null hypothesis, that there is no significant difference between scores on the experimental and control groups on the Factor of Sexual Behavior as measured by the AWS, with the pre-test as the covariate, was not rejected.

Null Hypothesis 9. There is no significant difference between the scores of the experimental and control groups on the factor of marital relationships and obligations as measured by the AWS with the pre-test as the covariate.

Table 18 presents the analysis of covariance results between the experimental and control group on the second testing of Factor VI, Marital Relationships and Obligations, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 18. Analysis of Covariance Between Experimental and Control on the Second Testing of Factor VI, Marital Relationships and Obligations, with the Pre-test as the Covariate

	N	Pretest Mean	2nd Testing	Adjusted Mean	Variance
Control	22	60.31	59.13	58.60	.623
Experimental	24	59.20	60.08	60.57	.571
F = 3.225	D.F. 1 and 43				

Since the computed F value of 3.225 for the second testing was not greater than the critical F value of 4.08, the null hypothesis that there is no significant difference between the scores of the experimental and control groups on the factor of Marital Relationships and Obligations as measured by the AWS with the pre-test as the covariate was not rejected.

Table 19 presents the analysis of covariance results between the experimental and control group on the third testing of Factor VI, Marital Relationships and Obligations, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 19. Analysis of Covariance Between Experimental and Control on the Third Testing of Factor VI, Marital Relationships and Obligations, with Pre-test as the Covariate.

	N	Pretest Mean	3rd Testing	Adjusted Mean	Variance
Control	22	60.31	61.04	60.66	1.325
Experimental	24	59.20	56.95	57.31	1.214

F = 4.440* D.F. = 1 and 43

*Significant .05 level.

Since the computed F value of 4.400 for the third testing was greater than the critical F value of 4.08, the null hypothesis that there is no significant difference between scores of the experimental and control groups on the factor of Marital Relationships and Obligations as measured by the AWS with the pre-test as the covariate was rejected.

DISCUSSION

Control and Experimental group differences on the scores of the Attitude Toward Women Scale do not emerge significant at the .05 level for Factor I Vocational, Education and Intellectual Roles, Factor II Freedom and Independence, Factor III Dating, Courtship and Etiquette, Factor IV Drinking, Swearing and Dirty Jokes and Factor V Sexual Behavior. The second testing of Factor VI Marital Relationships and Obligations does emerge as significant at the .05 level with the control group becoming more liberal in attitudes

as measured by the AWS.

Since the control group was not administered any treatment in this study, one may surmise that the control group became more liberal on this factor of the AWS due to outside influences from the study. This appears to be correct from the data; however, the results are influenced by the experimental group becoming more conservative on the third testing, which makes the control group appear to have become more liberal on the factor than what is truly the case. As this was not one of the factors in which there was a significant difference in male and female responses, both sexes in the experimental and control groups are credited for this difference. The second testing indicated a trend in control becoming more conservative and experimental more liberal in contrast to the third testing.

The lack of difference between the control and experimental groups initially appears to say that the treatment administered was ineffective in changing attitudes of the experimental group. This indeed may be correct.

Another explanation might be that the group who volunteered were, by and large, very sophisticated as compared to the average person in "taking tests". They know what's expected, what is the "right" thing to say and consciously or unconsciously answered the questions from a liberal viewpoint. The fact that all of these persons were administrators or in positions of influence in the University may have

made them sensitive to the quality of their answers. Although they were assured confidentiality, many of the participants could have felt apprehensive about this issue and responded accordingly. In light of the fact that one of the faculty changed their code number so that it was indistinguishable, except through the process of elimination, makes this argument plausible.

"Backlash" to the insinuation that indeed others may have believed they were biased might also cause the participants to attempt to correct this "misconception" by answering the questions as if they were very liberal. The instrument itself, because of the nature of its questions, could possibly elicit this response.

Another possible reason for a lack of difference between the experimental group and the control group might be a more honest approach to the questions, in particular Factor VI Marital Relationships and Obligations in which the control is significantly more liberal than the experimental group after treatment. The experience of the workshops may have convinced the experimental group that being biased is the result of socialization and organizational structure and not an individualized attempt to keep or put women "in their place", thus soliciting truly honest answers to the questions on the post-test of the AWS.

The resistance of the control and experimental groups on the second and third testing of participants makes one wonder, however,

about the results of the workshops. "Backlash" to the content of the workshops may have caused some of the extreme difficulty in re-testing of the groups.

The workshops were designed not to threaten people but instead to explore issues and look for answers to problems that exist. However, due to this highly controversial emotionally charged subject, any approach might alienate some persons.

The subject tends to centralize on attitudes toward women. Even the instrument used addressed only this issue. If more emphasis could have been placed on attitude toward men and reduction of sex role stereotypes as it applies to men, possibly the results might have been different.

Testing at a later date might also have produced different results. Time is sometimes necessary for assimilation. The second workshop might have been instrumental in significant change but time following the workshop was not sufficient to measure such change.

Since no significant changes occurred between the experimental and control groups, one wonders if the intervention was not long enough to effect any attitudinal or behavioral change among subjects in the experimental group. The Bowman-Nickerson Study in 1975, however, indicates that for their investigation a one-and one-half hour workshop produced significant changes in counselors at Boston University.

Another possibility that may explain why no change took place from the intervention is that this group of individuals, Heads of Departments at Montana State University, might have not been "ready to change". In the group tested in the Bowman-Nickerson Study Counselors returning for training showed significant differences apparent following such treatment. In discussion with Dr. Nickerson, the researcher learned that they believed this group was "ready for change" and acted accordingly. The group at Montana State University may have believed they were already liberal and avoided the change process.

AGE

Null Hypothesis 10. There is no significant difference between the scores of the three age groups on the factor of vocational, educational and intellectual roles as measured by the AWS with the pre-test as the covariate.

Table 20 presents the analysis of covariance results among the three age groups identified on the second testing of Factor I, Vocational, Educational and Intellectual Roles, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 20. Analysis of Covariance Among Three Age Groups on the Second Testing of Factor I, Vocational, Educational, and Intellectual Roles, with the Pre-test as the Covariate

	N	Pretest Mean	Factor I Mean	Adjusted Mean	Variance
29-39	13	63.46	63.00	61.07	.823
40-49	22	60.45	59.63	60.39	.474
50 and above	11	60.45	61.90	62.66	.944
F = 1.836	D. F. 1 and 43				

Table 21 presents the analysis of covariance results among the three age groups identified on the third testing of Factor I, Vocational, Educational and Intellectual Roles, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 21. Analysis of Covariance Among Three Age Groups on Third Testing of Factor I, Vocational, Educational, and Intellectual Roles, with the Pre-test as the Covariate

	N	Pretest Mean	Factor I Mean	Adjusted Mean	Variance
29-39	13	63.00	63.00	61.85	2.513
40-49	22	60.45	60.54	60.99	1.449
50 and above	11	60.45	58.63	59.08	2.885

F = .735 D.F. 1 and 43

Since the computed F value of 1.836 for the second testing and the computed F value .735 for the third testing was not greater than the critical F value of 4.08, the null hypothesis, that there is no significant difference among the scores of the three age groups on the factor of Vocational, Education and Intellectual Roles as measured by the AWS, with pre-test as the covariate, was not rejected.

Null Hypothesis 11. There is no significant difference among the scores of the three age groups on the factor of freedom and independence as measured by the AWS with the pre-test as the covariate.

Table 22 presents the analysis of covariance results among the three age groups identified on the second test of Factor II, Freedom and Independence, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 22. Analysis of Covariance Among Three Age Groups on Second Testing of Factor II, Freedom and Independence, with the Pre-test as the Covariate

	N	Pretest Mean	Factor II Mean	Adjusted Mean	Variance
29-39	13	13.76	14.07	13.57	.218
40-49	22	12.59	12.63	12.84	.126
50 and above	11	12.63	12.36	12.54	.251

F = 1.243 D.F. 1 and 43

Table 23 presents the analysis of covariance results among the three age groups identified, on the third testing of Factor II, Freedom and Independence, of the Attitude Toward Women Scale with pre-test as the covariate.

Table 23. Analysis of Covariance Among Three Age Groups on Third Testing of Factor II, Freedom and Independence, with the Pre-test as the Covariate

	N	Pretest Mean	Factor II Mean	Adjusted Mean	Variance
29-39	13	13.76	13.92	13.44	.304
40-49	22	12.59	12.45	12.65	.176
50 and above	11	12.63	11.81	11.98	.3504

F = 1.630 D.F. 1 and 43

Since the computed F value of 1.243 for the second testing and the computed F value 1.630 for the third testing was not greater than

the critical F value of 4.08, the null hypothesis, that there is no significant difference among the scores of the three age groups on the factor of Freedom and Independence as measured by the AWS with the pre-test as the covariate, was not rejected.

Null Hypothesis 12. There is no significant difference among the scores of the three age groups and the factor of dating, etiquette and courtship as measured by the AWS with the pre-test as the covariate.

Table 24 presents the analysis of covariance results among the three age groups identified, on the second testing of Factor III, Dating, Courtship and Etiquette, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 24. Analysis of Covariance Among Three Age Groups on Second Testing of Factor III, Dating, Courtship and Etiquette, with the Pre-test as the Covariate

	N	Pretest Mean	Factor III Mean	Adjusted Mean	Variance
29-39	13	22.15	21.92	20.79	.385
40-49	22	20.04	20.45	20.80	.216
50 and above	11	19.63	19.54	20.18	.436
F = .329	D.F. 1 and 43				

Table 25 presents the analysis of covariance results among the three age groups identified on the third testing of Factor III, Dating, Courtship and Etiquette, with the pre-test as the covariate.

Table 25. Analysis of Covariance Among Three Age Groups on Third Testing of Factor III, Dating, Courtship and Etiquette, With the Pre-test as the Covariate

	N	Pretest Mean	Factor III Mean	Adjusted Mean	Variance
29-39	13	22,15	21,53	20,39	.596
40-49	22	20,04	20,18	20,53	.335
50 and above	11	19,63	19,27	19,91	.675
F = .192	D.F. 1 and 43				

Since the computed F value of .329 for the second testing and the computed F value .192 for the third testing was not greater than the critical F value of 4.08, the null hypothesis, that there is no significant difference among the scores of the three age groups on the factor of Dating, Courtship and Etiquette as measured by the AWS with the pre-test as the covariate, was not rejected.

Null Hypothesis 13. There is no significant difference among the scores of the three age groups on the factor of drinking, swearing and jokes as measured by the AWS with the pre-test as the covariate.

Table 26 presents the analysis of covariance results among the three age groups identified on the second testing of Factor IV, Drinking, Swearing and Dirty Jokes, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 26. Analysis of Covariance Among Three Age Groups on Second Testing of Factor IV, Drinking, Swearing and Dirty Jokes, With the Pre-test as the Covariate

	N	Pretest Mean	Factor IV Mean	Adjusted Mean	Variance
29-39	13	9.46	9.38	9.69	.223
40-49	22	10.04	9.18	9.04	.131
50 and above	11	10.00	10.09	9.99	.262

F = 1.310 D.F. 1 and 43

Table 27 presents the analysis of covariance results among the three age groups identified, on the third testing of Factor IV, Drinking, Swearing and Dirty Jokes, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 27. Analysis of Covariance Among Three Age Groups on Third Testing of Factor IV, Drinking, Swearing and Dirty Jokes, With the Pre-test as the Covariate

	N	Pretest Mean	Factor IV Mean	Adjusted Mean	Variance
29-39	13	9.46	10.23	10.38	.292
40-49	22	10.04	9.45	9.38	.171
50 and above	11	10.00	9.63	9.58	.342

F = 1.084 D.F. 1 and 43

Since the computed F value of 1.310 for the second testing and

the computed F value of 1.084 for the third testing was not greater than the critical F value of 4.08, the null hypothesis that there is no significant difference among the scores of the three age groups on the factor of drinking, swearing and dirty jokes as measured by the AWS with the pre-test as the covariate, was not rejected.

Null Hypothesis 14. There is no significant difference among the scores of the three age groups on the factor of sexual behavior as measured by the AWS with the pre-test as the covariate.

Table 28 presents the analysis of covariance results among the three age groups identified, on the second testing of Factor V, Sexual Behavior, of the Attitude Toward Women Scale, with the pre-test as the covariate.

Table 28. Analysis of Covariance Among Three Age Groups on Second Testing of Factor V, Sexual Behavior, with the Pre-test as the Covariate

	N	Pretest Mean	Factor V Mean	Adjusted Mean	Variance
29-39	13	20.69	20.30	18.00	.286
40-49	22	16.63	16.45	17.67	.160
50 and above	11	17.72	16.90	17.18	.304
F = .576	D.F. 1 and 43				

Table 29 presents the analysis of covariance results among the

three age groups identified, on the third testing of Factor V, Sexual Behavior, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 29. Analysis of Covariance Among Three Age Groups on Third Testing of Factor V, Sexual Behavior, with the Pre-test as the Covariate

	N	Pretest Mean	Factor V Mean	Adjusted Mean	Variance
29-39	13	20.69	19.92	17.86	.614
40-49	22	16.63	16.36	17.45	.343
50 and above	11	17.72	17.72	17.97	.652

F = .161 D.F. 1 and 43

Since the computed F value of .576 for the second testing and the computed F value .161 for the third testing was not greater than the critical F of 4.08, the null hypothesis, that there is no significant difference among the scores of the three age groups on the factor of Sexual Behavior as measured by the AWS with the pre-test as the covariate, is not rejected.

Null Hypothesis 15. There is no significant difference among the scores of the three age groups on the factor of Marital Relationships and Obligations as measured by the AWS with the pre-test as the covariate.

Table 30 presents the analysis of covariance results among the three age groups identified, on the second testing of Factor VI, Marital Relationships and Obligations, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 30. Analysis of Covariance Among Three Age Groups on Second Testing of Factor VI, Marital Relationships and Obligations with the Pre-test as the Covariate

	N	Pretest Mean	Factor VI Mean	Adjusted Mean	Variance
29-39	13	61.61	62.23	60.56	1.150
40-49	22	58.50	57.90	59.00	.675
50 and above	11	60.00	60.00	59.76	1.327

F = .653 D.F. 1 and 4

Table 31 presents the analysis of covariance results among the three age groups identified, on the third testing of Factor VI, Marital Relationships and Obligations, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 31. Analysis of Covariance Among Three Age Groups on Third Testing of Factor VI, Marital Relationships and Obligations, with the Pre-Test as the Covariate

	N	Pretest Mean	Factor VI Mean	Adjusted Mean	Variance
29-39	13	61.61	62.15	60.91	2.411
40-49	22	58.50	57.86	58.68	1.416
50 and above	11	60.00	57.18	57.00	2.783
F = 1.499	D.F. 1 and 43				

Since the computed F value of .653 for the second testing and the computed F value 1.499 for the third testing was not greater than the critical F value of 4.08, the null hypothesis, that there is no significant difference among the scores of the three age groups on the factor of Marital Relationships and Obligations as measured by the AWS with pre-test as the covariate, was not rejected.

DISCUSSION

Differences among the three age groups (Group I 29-39, Group II 40-49, Group III 50 and above) do not emerge significantly at the .05 level for any of the six factors of the AWS.

These findings differ from results found on an earlier study by Spence and Helmreich, 1972, where an older group of persons were compared with a younger group. The younger group emerged as significantly more liberal in attitudes as measured by the AWS than the older subjects.

Differences may exist in the relative age level of these two studies, however. In the Spence and Helmreich investigation the groups examined were students at the University and parents of these students. An age difference may exist between these two studies. Students of the earlier study probably fell within an eighteen (18) to twenty-one (21) age group, whereas their parents were probably in their late thirties and above. The age span in this study covers ages twenty-nine (29) to the middle sixties. Essentially the Montana State University investigation probably involves an older population in total than the earlier study.

The population of the Montana State University study differs from this earlier investigation also in that educational level, exposure to youth and varying opinions and lifestyles, etc. may provide the various age groups of this study a broader base from which to formulate attitudes, which in this case appears to be uniform and consistent within the age span of the participants of this investigation.

MALE OR FEMALE

Null Hypothesis 16. There is no significant difference between the scores of the male and female groups on the factor of Vocational, Educational and Intellectual Roles as measured by the AWS with the pre-test as the covariate.

Table 32 presents the analysis of covariance results between the male and female groups on the second testing of Factor I, Vocational, Educational and Intellectual Roles, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 32. Analysis of Covariance Between Male and Female on the Second Testing of Factor I, Vocational, Educational, and Intellectual Roles, with the Pre-Test as the Covariate

	N	Pretest Mean	Second Testing	Adjusted Mean	Variance
Male	33	59.78	59.57	60.89	.344
Female	13	65.15	65.07	61.73	.936
F = .527		D.F. 1 and 43			

Table 33 presents the analysis of covariance results between the male and female groups on the third testing of Factor I, Vocational, Educational and Intellectual Roles, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 33. Analysis of Covariance Between Male and Female on the Third Testing of Factor I, Vocational, Educational, and Intellectual Roles, with the Pre-test as the Covariate

	N	Pretest Mean	Third Testing	Adjusted Mean	Variance
Male	33	59.78	59.27	60.00	.969
Female	13	65.15	64.61	62.76	2.634

F = 1.996 D.F. 1 and 43

Since the computed F value of .527 for the second testing and the computed F value 1.996 for the third testing was not greater than the critical F value of 4.08, the null hypothesis that there is no significant difference between the scores of the male and female groups on the factors of Vocational, Educational and Intellectual Roles as measured by the AWS, with the pre-test as the covariate, was not rejected.

Null Hypothesis 17. There is no significant difference between the scores of the male and female groups on the factor of Freedom and Independence as measured by the AWS with the pre-test as the covariate.

Table 34 presents the analysis of covariance results between the male and female groups on the second testing of Factor II, Freedom and Independence, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 34. Analysis of Covariance Between Male and Female on the Second Testing of Factor II, Freedom and Independence, with the Pre-Test as the Covariate

	N	Pretest Mean	Second Testing	Adjusted Mean	Variance
Male	33	12.45	12.42	12.70	.082
Female	13	14.15	14.38	13.67	.218
F = 3.022	D.F. 1 and 43				

Table 35 presents the analysis of covariance results between the male and female groups on the third testing of Factor II, Freedom and Independence, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 35. Analysis of Covariance Between Male and Female on the Third Testing of Factor II, Freedom and Independence, with the Pre-Test as the Covariate

	N	Pretest Mean	Second Testing	Adjusted Mean	Variance
Male	33	12.45	12.00	12.25	.108
Female	13	14.15	14.53	13.90	.286

F = 6.650* D.F. 1 and 43

*Significant > .05 level.

Since the computed F value of 3.022 for the second testing was not greater than the critical F value of 4.08, the null hypothesis,

that there is no significant difference between the scores of the male and female groups on the factor of Freedom and Independence as measured by the AWS with the pre-test as the covariate, was not rejected.

Since the computed F value of 6.650 for the third testing was greater than the critical F value of 4.08, the null hypothesis, that there is no significant difference between the scores of the male and female groups on the factor of Freedom and Independence as measured by the AWS with the pre-test as the covariate was rejected.

Null Hypothesis 18. There is no significant difference between the scores of the male and female groups on the factor of Dating, Etiquette and Courtship as measured by the AWS with the pre-test as the covariate.

Table 36 presents the analysis of covariance results between the male and female groups on the second testing of Factor III, Dating, Courtship and Etiquette, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 36. Analysis of Covariance Between Male and Female on the Second Testing of Factor III, Dating, Courtship and Etiquette, with the Pre-Test as the Covariate

	N	Pretest Mean	Second Testing	Adjusted Mean	Variance
Male	33	20.06	19.84	20.17	.125
Female	13	21.76	22.69	21.87	.325

F = 6.316* D.F. 1 and 43

*Significant > .05 level.

Table 37 presents the analysis of covariance results between the male and female groups on the third testing of Factor III, Dating, Courtship and Etiquette, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 37. Analysis of Covariance Between the Male and Female on the Third Testing of Factor III, Dating, Courtship and Etiquette with the Pre-Test as the Covariate

	N	Pretest Mean	Third Testing	Adjusted Mean	Variance
Male	33	20.06	19.45	19.77	.195
Female	13	21.76	22.61	21.80	.505

F = 5.75* D.F. 1 and 43

*Significant > .05 level.

Since the computed F value of 6.316 for the second testing was greater than the critical F value of 4.08, the null hypothesis that there is no significant difference between the scores of the male and female groups on the factor of Dating, Courtship and Etiquette as measured by the AWS with the pre-test as the covariate, was rejected.

Since the computed F value of 5.75 for the third testing was greater than the critical F value of 4.08, the null hypothesis, that there is no significant difference between the scores of the male and female groups on the factor of Dating, Courtship and Etiquette as measured by the AWS with the pre-test as the covariate, was rejected.

Null Hypothesis 19. There is no significant difference between the scores of the male and female groups on the factor of Drinking, Swearing and Jokes as measured by the AWS with the pre-test as the covariate.

Table 38 presents the analysis of covariance results between the male and female groups on the second testing of Factor IV, Drinking, Swearing and Dirty Jokes, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 38. Analysis of Covariance Between Male and Female on the Second Testing of Factor IV, Drinking, Swearing and Dirty Jokes, with the Pre-Test as the Covariate

	N	Pretest Mean	Second Testing	Adjusted Mean	Variance
Male	33	9.45	9.03	9.33	.092
Female	13	10.92	10.53	9.77	.244
F = .561	D.F. 1 and 43				

Table 39 presents the analysis of covariance results between the male and female groups on the third testing of Factor IV, Drinking, Swearing and Dirty Jokes, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 39. Analysis of Covariance Between Male and Female on the Third Testing of Factor IV, Drinking, Swearing and Dirty Jokes, with the Pre-Test as the Covariate

	N	Pretest Mean	Third Testing	Adjusted Mean	Variance
Male	33	9.45	9.24	9.35	.110
Female	13	10.92	10.92	10.64	.292
F = 4.01	D.F. 1 and 43				

Since the computed F value of .561 for the second testing and the computed F value 4.01 for the third testing was not greater than the critical F value of 4.08, the null hypothesis, that there is no significant difference between the scores of the male and female groups on the factor of Drinking, Swearing and Jokes as measured by the SWS with the pre-test as the covariate, was not rejected.

Null Hypothesis 20. There is no significant difference between the scores of the male and female groups on the factor of Sexual Behavior as measured by the AWS with the pre-test as the covariate.

Table 40 presents the analysis of covariance results between the male and female groups on the second testing of Factor V, Sexual Behavior, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 40. Analysis of Covariance Between Male and Female on the Second Testing of Factor V, Sexual Behavior, with the Pre-Test as the Covariate

	N	Pretest Mean	Second Testing	Adjusted Mean	Variance
Male	33	17.27	16.54	17.19	.087
Female	13	20.00	20.46	18.81	.229

F = 8.089* D.F. 1 and 43

*Significant > .05 level.

Table 41 presents the analysis of covariance results between the male and female groups on the third testing of Factor V, Sexual Behavior, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 41. Analysis of Covariance Between Male and Female on the Third Testing of Factor V, Sexual Behavior, with the Pre-Test as the Covariate

	N	Pretest Mean	Third Testing	Adjusted Mean	Variance
Male	33	17.27	16.69	17.27	.204
Female	13	20.00	20.23	18.76	.537

F = 2.901 F.D. 1 and 43

Since the computed F value of 8.089 for the second testing was greater than the critical F value of 4.08, the null hypothesis, that

there is no significant difference between the scores of the male and female groups on the factor of Sexual Behavior as measured by the AWS with the pre-test as the covariate, was rejected.

Since the computed F value of 2.901 for the third testing was not greater than the critical F value of 4.08, the null hypothesis, that there is no significant difference between the scores of the male and female groups on the factor of Sexual Behavior as measured by the AWS with the pre-test as a covariate, was not rejected.

Null Hypothesis 21. There is no significant difference between the scores of the male and female groups on the factor of Marital Relationships and Obligations as measured by the AWS with the pre-test as the covariate.

Table 42 presents the analysis of covariance results between the male and female groups on the second testing of Factor VI, Marital Relationships and Obligations, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 42. Analysis of Covariance Between the Male and Female on the Second Testing of Factor VI, Marital Relationships and Obligations with the Pre-Test as the Covariate

	N	Pretest Mean	Second Testing	Adjusted Mean	Variance
Male	33	58.42	57.93	59.07	.436
Female	13	63.07	63.92	61.03	1.162
F = 2.294	D.F. 1 and 43				

Table 43 presents the analysis of covariance results between the male and female groups on the third testing of Factor VI, Marital Relationships and Obligations, of the Attitude Toward Women Scale with the pre-test as the covariate.

Table 43. Analysis of Covariance Between Male and Female on the Third Testing of Factor VI, Marital Relationships and Obligations, with the Pre-Test as the Covariate

	N	Pretest Mean	Third Testing	Adjusted Mean	Variance
Male	33	58.42	57.18	57.98	.936
Female	13	63.07	63.30	61.26	2.49
F = 2.996	D.F. 1 and 43				

Since the computed F value of 2.294 for the second testing and the computed F value 2.996 for the third testing was not greater than the critical F value of 4.08, the null hypothesis, that there is no significant difference between the scores of the male and female

groups on the factor of Marital Relationships and Obligations as measured by the AWS, with pre-test as the covariate, was not rejected.

DISCUSSION

Male and female differences on the scores of the Attitude Toward Women Scale do not emerge significantly at the .05 level for Factor I, Vocational, Educational and Intellectual Roles, Factor IV Drinking, Swearing and Dirty Jokes and Factor VI Marital Relationships and Obligations.

A significant difference at the .05 level does exist in the second testing of Factor II Freedom and Independence with females being more liberal than males. A significant difference at the .05 level also exists on both post-tests for Factor III Dating, Courtship and Etiquette, with females being more liberal than males. And, finally, on Factor V Sexual Behavior, females emerged with more liberal attitudes on the second testing as measured by the AWS.

Worthy of note is that females emerge slightly more liberal than males but not significantly so on all of the other pre-tests and all of the other post-tests administered by this investigator.

Also, females became slightly more liberal but not significantly so, on all of the other pre-tests to post-tests on all other factors; whereas, males became slightly more conservative but not significantly so, from pre-tests to post-tests on all factors of the AWS.

On Factor I Vocational, Educational and Intellectual Roles,

Factor II Freedom and Independence, Factor III Drinking, Swearing and Dirty Jokes and Factor VI Marital Relationships and Obligations males became slightly less liberal but not significantly so, from post-test I to post-test II and became slightly more liberal but not significantly so, on Factor V Sexual Behavior from post-test I to post-test II.

From the literature describing the use of the Attitude Toward Women Scale, this instrument has not failed to distinguish between differences in attitudes of male and female subjects. This investigation is no exception. The significant factors that emerged highlighting the more liberal attitudes of females are, however, different from those factors found significant in previous studies. Spence and Helmreich in 1972 examined male and female students at the University of Texas. Their results revealed that in spite of an overall trend toward liberal attitudes of their female subjects, the women were more reluctant to endorse parity between the sexes than their male counterparts on items relating to sexual behavior, dating and courtship. The female participants in the Montana State University project, in contrast to this earlier study, were significantly different from males in Factor III Dating, Courtship and Etiquette and Factor V Sexual Behavior and Factor II Freedom and Independence.

Factor II, Freedom and Independence, emerges along with the previously mentioned Factor III Dating, Courtship and Etiquette and Factor V Sexual Behavior, as items in which mothers of students in

Spence and Helmreich's investigation in 1972 experienced more conservative responses. Again, this contrasts with the Montana State University study.

In addition to the factors that were significantly different, females in this study displayed a trend toward more liberal responses than male counterparts at Montana State University in all factors of the AWS in all of the test administrations. Although these are not significant, the consistent trend is worth noting.

One possibility for the discrepancies between the Montana State University study and that of earlier investigations is that females have become more liberal in these areas in recent years and that males have become more liberal in the areas previously found to demonstrate differences. Thus, new factors emerge as being significantly different.

Reasons that female subjects overall were more liberal than males might be due to males offering more "honest" responses to these questions than females either consciously or unconsciously. On the other hand, females may have just been clearly more liberal on these issues than the males. Males may have resisted the whole project from the beginning, stating less liberal attitudes than what was truly their attitudes. Or, males may have felt it was okay to be biased more so than females and expressed these feelings freely on the AWS.

Outside experiences may have entered in affecting males producing

less liberal responses than females; or outside experiences may have entered in affecting females producing more liberal responses than males. Females in this study clearly indicated more liberal attitudes than their male counterparts from responses on the AWS, for whatever reasons one might suggest.

ADVISOR-STUDENT RATING SCALE

An effort was made by this investigator to find a suitable instrument to examine behavior of persons in the project as they interact with students in advising sessions. No such instrument was available so in lieu of this limitation, an experimental instrument was devised. The instrument was used two quarters at Montana State University, Winter and Spring 1977. A total of sixty-two Rating Scales were completed on the experimental and control groups. This instrument, although in its early stages of development, has raised some issues regarding the advising function and with further study could prove to examine some important processes in student-faculty conferences.

No specific outcome was anticipated from this instrument, thus no "right" or "wrong" responses. The Rating Scale was used instead to examine patterns of answers from students about advisors in the experimental and control groups.

Although there seems to be few differences between faculty who participated in the experimental group and those in the control, items will be highlighted for further research in this area.

Table 44. Advisor-Student Rating Scale Summary

Advisor Rating Scale Data Compilation

Student's Age Category

	17-19 1		20-24 2		25-29 3		30-35 4		36 & above 5	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Experimental	15	46.9	13	40.6	3	9.4	1	3.1	0	0
Control	15	50.0	10	33.3	4	13.3	1	3.3	0	0

Student's Sex

	Male 1		Female 2	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Experimental	16	50.0	16	50.0
Control	11	36.7	19	63.3

Student's Curriculum Category

	General Studies 1		Humanities 2		Sciences 3		Professional 4		Other 5	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Experimental	15	46.9	1	3.1	11	34.4	5	15.6	0	0
Control	9	30.0	2	6.7	10	33.3	9	30.0	0	0

Table 44. Advisor-Student Rating Scale Summary (Continued)

Faculty Member's Sex

	Male		Female	
	1		2	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Experimental	27	84.4	5	15.6
Control	28	93.3	2	6.7

Item 1. It was easy to see this faculty member.

	Strongly Agree		Agree		Disagree		Strongly Disagree		No Response	
	1		1		2		3		NR	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Experimental	16	50.0	10	31.1	3	9.4	3	9.4	0	0
Control	21	70.0	9	30.0	0	0	0	0	0	0

Item 2. The faculty member kept his/her appointment (when made in advance).

	Yes		No		No Response	
	1		2			
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Experimental	30	93.8	0	0	2	6.3
Control	29	96.7	1	3.3	0	0

Table 44. Advisor-Student Rating Scale Summary (Continued)

Item 3. The faculty member was prompt for our meeting.

	Yes 1		No 2		No Response	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Experimental	27	84.4	3	9.4	2	6.3
Control	24	80.0	5	16.7	1	3.0

Item 4. I talked to the faculty member _____ minutes.

Categories of minutes spent in session:

	Under 15 min. 1		15-29 min. 2		30-44 min. 3		45-59 min. 4		60 & above 5	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Experimental	4	12.5	14	43.8	10	31.3	2	6.3	2	6.3
Control	5	16.7	13	43.3	6	20.0	2	6.7	4	13.3

Item 5. I spoke to the faculty member ____% of the time. The faculty member spoke to me ____% of the time during our meeting (should equal 100%).

	1%-14% 1		15%-24% 2		25%-49% 3		50%-74% 4		74%-100% 5	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Experimental	1	3.1	3	9.4	15	46.9	11	34.4	2	6.3
Control	3	10.0	4	13.3	11	36.7	9	30.0	3	10.0

Table 44. Advisory-Student Rating Scale Summary (Continued)

Item	Experimental		Control		No Response
	Agree	Disagree	Agree	Disagree	
6	5	25	3	26	3
7	5	26	5	24	2
8	1	30	0	29	2
9	2	29	3	26	2
10	29	2	29	0	2
11	5	26	4	25	2
12	3	28	3	26	2
13	3	28	3	26	2
14	1	30	0	29	2
15	29	2	0	29	2
16	4	27	0	29	2
17	28	3	28	1	2
18	10	21	11	27	2
19	6	25	2	27	2
20	16	15	8	21	2
21	28	3	25	4	2
22	30	1	28	1	2
23	30	1	26	3	2
24	29	2	28	1	2
25	2	29	2	27	2

Table 44. Advisory-Student Rating Scale Summary (Continued)

Item	Experimental		Control		No Response
	Agree	Disagree	Agree	Disagree	
26	2	29	2	27	2
27	19	12	20	9	2
28	7	24	3	26	2
29	2	29	1	28	2
30	1	20	0	29	2
31	6	25	4	25	2
32	23	8	16	13	2
33	4	27	1	27	3
34	29	2	26	3	2
35	27	4	25	4	2
36	24	7	27	2	2
37	21	10	21	8	2
38	28	3	26	3	2

In examining the data, only two items emerge indicating differences between the control and the experimental groups.

Item 20: The faculty member allowed interruptions to take place during the interview, for example, incoming calls and people "stopping by."

Students indicated that sixteen (16) faculty members in the experimental group allowed interruptions to take place during the advising session in contrast to only eight (8) members in the control group.

Item 32: The faculty member suggested possibilities for advanced degrees in the areas of my interest.

Students reported that twenty-three (23) faculty members in the experimental group suggested possibilities for advanced degrees while only sixteen (16) in the control group provided such suggestions.

Items in which students indicated a substantial number of positive responses for faculty members in both the experimental and control group are as follows:

Item 10: The faculty member listened to me.

Students stated that twenty-nine (29) of experimental group and twenty-nine (29) of the control group listened to what they had to say.

Item 15: I liked the faculty member as a person.

Students responded affirmatively with twenty-nine (29) in the experimental group and twenty-eight (28) in the control. Only two (2) from the experimental group and one (1) from the control were not liked by students.

Item 17: The faculty member demonstrated a relaxed body position during the interview.

Students reported that twenty-eight (28) of the experimental and twenty-eight (28) of the control appeared physically relaxed during the advising session.

Item 22: The faculty member treated me like an adult.

Thirty (30) faculty members of the experimental group and twenty-eight (28) of the control were credited with treating students like adults in these interviews.

Item 23: The faculty member maintained good eye contact during the session.

Students stated that thirty (33) faculty of the experimental group and twenty-eight (28) of the control exhibited good eye contact.

Item 24: The faculty member encouraged me.

Twenty-nine (29) faculty members in the experimental group and twenty-eight (28) in the control were credited as providing encouragement to students during these sessions.

Item 38: I would be willing to return to this faculty member for help in the future.

Twenty-eight (28) faculty members in the experimental group and twenty-six (26) in the control were persons students would be interested in returning to for help in the future.

Item 34: The faculty member seemed to understand my point of view.

Twenty-nine (29) persons in the experimental group and twenty-six (26) in the control made students believe that their point of view was understood.

Items in which students indicated a substantial number of negative responses for faculty members in both the experimental and control groups are as follows:

Item 8: The faculty member acted cold and distant and paid little attention to what I was saying.

Students reported only one (1) faculty in the experimental group responded in this fashion and none in the control group.

Item 9: The faculty member made me feel as if I was wasting his/her time. He/She fiddled with a pen, shuffled papers and doodled during the interview.

The data suggests that two (2) faculty members in the experimental group behaved in this fashion and three (3) persons in the control group.

Item 12: The faculty member interrupted me as I talked and took over the conversation.

Six (6) faculty members in the experimental group and three (3) in the control group interrupted students and took over the conversation.

Item 13. The faculty member talked more about themselves or other things than about me and my questions and concerns.

Students indicated that three (3) faculty members in the experimental group and three (3) in the control behaved in this manner during their interviews.

Item 14: The faculty member kept throwing in funny remarks when I was trying to be serious.

One person in the experimental group and none in the control behaved in this manner during the advising session.

Item 16: The faculty member seemed to be "talking down" to me in a condescending manner.

Four (4) students stated their faculty member in the experimental group were condescending while none were counted in the control group.

Item 25: The faculty member made jokes or comments with a sexual overtone.

Students reports on the Rating Scale that two (2) persons in the experimental group and two (2) persons in the control made jokes or comments with a sexual overtone.

Item 26: The faculty member looked at his/her watch several times during our interview.

Students indicated that one (1) person in the experimental group and three (3) in the control looked at their watch during the interview.

Item 29: The faculty member asked questions of me concerning my plans for marriage and family.

Two (2) persons in the experimental group and one (1) person in the control asked questions regarding marriage and family of students in the advising sessions.

Item 30: The faculty member discouraged me from considering a career in a field dominated by the opposite sex.

One (1) person in the experimental group discouraged a student from considering a career in a field dominated by the opposite sex.

Item 33: I believe I would have been treated differently had I been a member of the opposite sex.

Students indicated that they believed four (4) faculty in the experimental group and one (1) in the control would have treated them differently if they had been a member of the opposite sex.

The Rating Scale suggests consistency between the experimental and control group and highlights very few differences after treatment. One item suggests experimental group was more sensitive to encouraging students to continue with advanced degrees in their areas than the control group. On the other hand, the control emerges as more sensitive to eliminating interruptions, outside interference within

the advising process.

The instrument, although attempting to measure behavior, is based much on student's perceptions of what occurred during these conferences. Further limitations of the instrument include the necessity of completing the form after the advising session, recalling what occurred. The issue of confidentiality was again a concern. Students by-and-large were receptive to this procedure but some did indicate apprehension over completing this Rating Scale, fearful of retribution if disclosure should occur. The degree of truthfulness therefore may be somewhat in question.

Some students may have also seen this instrument as a means of destroying confidence in administrators at the University in an effort to "get back" at those in power. No comments suggested this motive but such is a possibility.

WORKSHOP EVALUATION SUMMARY

Workshop I

Twenty-eight (28) of the Heads of Departments who participated in the experimental group noted their overall impression of Workshop I as above average, while eleven (11) expressed a negative impression. On overall evaluation of the work of the consultants netted twenty-eight (28) above average responses and ten (10) negative. In response to the question of participants learning about themselves, seventeen (17) were above average while eleven (11) felt the workshop added nothing of new learning about themselves. The important question regarding the extent that participants learned about sex roles and sex role stereotyping, provided twenty-three (23) positive responses with only twelve (12) in the negative.

Overall, the workshop evaluations for Workshop I were positive with most comments in support of this project, many persons expressing interest in further training in this area. Some negative criticisms were expressed with suggestions offered to improve future workshops. For further breakdown of the data obtained on workshop evaluations I with summary of participants comments, see Appendices N and O.

Workshop II

Workshop evaluations for Workshop II were also generally positive in ratings by participants. The numbers of persons attending this

second training fell markedly, from the first workshop, with a number of last minute cancellations.

In evaluating the work of the consultant, seventeen (17) expressed above average reactions, while one indicated a negative impression to the consultant's work. In evaluating the extent of new self learning, ten (10) participants rated this workshop as above average, two (2) expressed below average ratings. The overall rating of the workshop was fourteen (14) above average and one (1) below average. The extent participants learned about sex role stereotyping netted eleven (11) positive responses with only one (1) negative response.

Comments again ranged from very positive to very negative with most participants indicating the workshop was worthwhile. For a further breakdown of the data from Workshop II evaluations, see Appendix Q and R.

The value of workshop evaluations are at times somewhat in question, particularly when completed immediately following the training. The belief by some that a "halo effect" alters the perceptions of participants under such data gathering conditions leaves one wondering if responses would have been the same if collected at a later time. The data at hand indicates an overall positive reaction to both workshops in general.

GENERAL DISCUSSION

In the process of data collection in this study a considerable amount of resistance seemed to be taking place that was not apparent from the scores on the AWS and Ratings and comments on the Workshop evaluations.

Some Heads of Departments did not complete all of the items on the AWS. Some failed to show for the testing sessions, others failed to show for follow-up testing sessions. Numerous telephone calls, reminders with secretaries, notes, etc. were necessary to obtain completion of the AWS by persons in the control group and by those who underwent the training experience. Special testing in the faculty member's office was required for eight (8) cases in the third testing for those who did not come to any of the earlier testing sessions.

Resistance was also observed from negative comments about the instrument used. One might also surmise that the reduction of those participating in the second workshop might also be an expression of resistance to the topic or project in general. These observations seem somewhat in conflict with the overall positive responses made on the workshop evaluations.

A number of reasons might exist for this apparent reluctance to cooperate with testing procedures in the project.

One might be that Heads of Departments were too busy to make the testing sessions as scheduled.

Another possibility is that they were unaware or unconcerned about the need for testing in this project and put too low priority on the testing sessions.

Another possibility is that some of the Heads of Departments were reacting negatively to the project and used the testing sessions as a means of expressing their dissatisfaction.

One possibility is that the Heads of Departments were "bored" with the testing since there was a relatively large time span between the three testing periods.

Also, they may have felt no commitment to complete the testing particularly the control group where essentially no rewards were given.

Another explanation for the poor response to the post-tests is that the Department Heads were aware that testing would be done by a graduate student. Knowing this and being aware that the student had "no clout" might have made them place this activity on somewhat of a low priority. In some cases, however, this may have been impetus for cooperation.

At the University of Washington in an earlier study using this instrument, the author surmised that considerable dissonance had been generated by the intervention causing less liberal subjects to be resistant to retesting. This, however, does not explain why males and females in the control group in this investigation avoided post-testing

procedures. Possibly a combination of reasons caused this occurrence.

Another issue pertinent to data collection involves concern of faculty about confidentiality. It was found in an earlier study that faculty were reluctant to participate in a project where disclosure of information took place, in fear of possible retaliation on the part of top administration. Although this concern has taken a high priority and security for participants have been built in the design of the research project, comments were made which suggests participants were still concerned about this issue. In light of this concern, responses on the AWS may have been influenced resulting in a more liberal attitude than what might actually be the case.

SUMMARY

Twenty-one (21) hypotheses were analyzed and discussed with regards to being rejected or not rejected at the .05 level of significance.

Attitudes and behavior were examined by the use of the Attitude Toward Women Scale and the Advisor-Student Rating Scale. Additional data was gathered at the completion of the interventions with workshop evaluations.

The six factors of the Attitude Toward Women Scale as applied to the (1) experimental and control groups, (2) three age groupings, and (3) sex of the subjects were tested utilizing an analysis of

covariance with the pre-test as the covariate,

Females emerge as significantly more liberal than males on the summary scores of the second testing of the AWS. Also on the second testing, females emerge as significantly more liberal on Factor II Freedom and Independence. Second and third testing produced a significant difference between males and females on Factor III Dating, Courtship and Etiquette. The second testing also produced a significant difference between males and females on Factor V Sexual Behavior, with females becoming more liberal.

No significant differences occurred among the three age groupings on either of the post-tests.

Factor VI Martial Relationships and Obligations, emerged as significant in the second testing between the experimental and control group with the control emerging as more liberal.

Two items emerged as noticable differences in behavior of the experimental and control groups on the Advisor-Student Rating Scale, Item 20 and Item 32.

Overall, the Workshop Evaluations indicated positive reactions to the two workshops utilized in the study. Further discussion of the results and revelant information on the data-gathering process have been included in this chapter.

Chapter 5

SUMMARY

The problem of this study was to determine if there is a difference in attitudes and behavior of Heads of Departments at Montana State University after participating in training designed to reduce sexual bias and sex role stereotyping as compared to a similar group not receiving this treatment.

General questions to be asked:

1. Is the intervention strategy effective in reducing sex bias and sex role stereotyping as it applies to women in those heads of departments who participate in the project?
2. Is the intervention strategy effective in reducing unconscious sexist behavior of heads of departments in the advising function?
3. Is there a difference in sexual bias and sex role stereotyping as it applies to women between male and female heads of departments before and following the treatment?
4. Is there a difference in the effectiveness of the treatment on persons in various age categories?

The six factors of the Attitude Toward Women Scale were applied

to three areas to be investigated: (1) Experimental and Control Group, (2) The Three Age Groupings, and (3) the Sex of the Participants. Each was tested utilizing an analysis of covariance with the pre-test as the covariate.

The following twenty-one null hypotheses were tested at the .05 level.

Null Hypothesis 1: There are no significant differences between the scores of the experimental and control groups as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 2: There are no significant differences among the scores of the three age groups as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 3: There are no significant differences between the scores of the male and female groups as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 4: There is no significant difference between the scores of the experimental and control groups on the factor of vocational, educational and intellectual roles as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 5: There is no significant difference between the scores of the experimental and control groups on the factor of freedom and independence as measured by the AWS with the pre-test as a covariate.

Null Hypothesis 6: There is no significant difference between the scores of the experimental and control groups on the factor of dating, etiquette and courtship as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 7: There is no significant difference between the scores of the experimental and control groups on the factor of drinking, swearing and jokes as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 8: There is no significant difference between the scores of the experimental and control groups on the factor of sexual behavior as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 9: There is no significant difference between the scores of the experimental and control groups on the factor of marital relationships and obligations as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 10: There is no significant difference among the scores of the three age groups on the factor of vocational, educational and intellectual roles as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 11: There is no significant difference among the scores of the three age groups on the factor of freedom and independence as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 12: There is no significant difference among the

scores of the three age groups on the factor of dating, etiquette and courtship as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 13: There is no significant difference among the scores of the three age groups on the factor of drinking, swearing and jokes as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 14: There is no significant difference among the scores of the three age groups on the factor of sexual behavior as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 15: There is no significant difference among the scores of the three age groups on the factor of marital relationships and obligations as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 16: There is no significant difference between the scores of the male and female groups on the factor of vocational, educational and intellectual roles as measured by the AWS with the pre-test as the covariate.

Null Hypothesis 17: There is no significant difference between the scores of the male and female groups on the factor of freedom and independence as measured by the AWS with the pre-test as a covariate.

Null Hypothesis 18: There is no significant difference between the scores of the male and female groups on the factor of dating, etiquette and courtship as measured by the AWS with the pre-test as

a covariate.

Null Hypothesis 19: There is no significant difference between the scores of the male and female groups on the factor of drinking, swearing and jokes as measured by the AWS with the pre-test as a covariate.

Null Hypothesis 20: There is no significant difference between the scores of the male and female groups on the factor of sexual behavior as measured by the AWS with the pre-test as a covariate.

Null Hypothesis 21: There is no significant difference between the scores of the male and female groups on the factor of marital relationships and obligations as measured by the AWS with the pre-test as the covariate.

The problem of this study was approached in the following manner. Volunteers from Heads of Departments were solicited for this project. An experimental and control group were identified by stratified Random Sampling Procedure.

The intervention strategy administered to the experimental group consisted of two off-campus workshops 5 months apart conducted by outside consultants. The training focused on presentation of current information on men and women, their achievement patterns and the world of work coupled with examination of one's own stereotyping and biases.

In addition to examining attitudes of Heads of Departments,

a student population from a parallel study was utilized to rate faculty members from both experimental and control groups to examine trends as they emerged and as they applied to the two groups. Also workshop evaluations were utilized following each of the two workshops.

CONCLUSIONS

The interventions for Heads of Departments at Montana State University did not effect change as measured by the Attitude Toward Women Scale and the Advisor-Student Rating Scale. However, the workshop evaluations indicate that indeed some progress had been made in this area. Participants on a whole felt the workshops were a good beginning for reducing sex role stereotyping with regards to vocational choice at Montana State University.

Additional information sought by this investigator regarding the six factors of the Attitude Toward Women Scale as they relate to the differences between (1) the male and female subjects, (3) among the three age categories and (3) between the experimental and control group resulted in the following data:

No significant differences occurred among the three age groups identified. Only one significant difference emerged between the experimental and control group, and that was Factor VI Marital Relationships and Obligations, with the control group becoming more

liberal. Significant differences occurred between the male and female groups with females becoming more liberal on Factor II Freedom and Independence, Factor III Dating, Courtship and Etiquette, Factor V Sexual Behavior and second testing of the total.

Two items emerged as noticable differences between the experimental and control group on the Advisor-Student Rating Scale - Items 20, the faculty member allowed interruptions to take place during the interview, for example, incoming calls and people "stopping by", and 32, the faculty member suggested possibilities for advanced degrees in the areas of my interest.

Overall, Workshop Evaluations, as stated below, indicated positive reactions to the two workshops utilized in the study. Because of limited numbers used in this research project caution is suggested to the reader regarding interpretation and generalization of the results of this study to other similar groups in other similar situations.

RECOMMENDATIONS

Based upon the statistical results and the conclusions of this investigation, several recommendations emerge as appropriate areas for further research.

1. This investigation, as it related to reduction of sex role stereotyping and sexual bias in vocational choice,

should be replicated or similar research undertaken on other College and University campuses.

2. A related investigation should be undertaken using populations other than Heads of Departments at Universities and Colleges. General faculty, students and top administration would be suitable populations for additional study.
3. Related research should include all of the population selected and not just those who volunteer with increased numbers of subjects in the study.
4. Additional research in this area should utilize multiple instrumentation.
5. Additional research in this field should more thoroughly examine other demographic data such as religion, marital status, sex and numbers of children, position and positions held, educational level, occupation of spouse, etc.
6. Replicated or similar research should include longitudinal data to examine more thoroughly the effects of the intervention.
7. Further research utilizing the Advisor-Student Rating Scale should include additional validity and reliability data and a determination of specific anticipated outcome of responses on the Rating Scale.

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APPENDICES

178
APPENDIX A

REPORT 1
PAGE 1
2-77

SUMMARY OF TOTAL NET ENROLLMENT BY COLLEGE/CURRICULUM/OPTION FOR AUTUMN QUARTER 1977 TO OCTOBER 14, 1977

COLLEGE/CURRICULUM/OPT	DOC(9)		HAS(8)		FST		NON(6)		2ND(5)		SR(4)		JR(3)		SOPH(2)		FROSH(1)		SPEC'L		TOTAL		SUB		GRAND	
	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M
GENERAL STUDIES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48	83	304	342	-	-	352	425	777			
Spec Non-Degree	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	22	8	22	30			
NON-DEGREE	-	-	-	-	-	-	76	74	-	-	-	-	-	-	-	-	-	-	-	-	76	74	150			
Spec Non-Degree	-	-	-	-	-	-	6	3	-	-	-	-	-	-	-	-	-	-	-	-	6	3	9			
TCHR CERT	-	-	-	-	-	-	12	36	-	-	-	-	-	-	-	-	-	-	-	-	12	36	48			
TOTAL GEN ST	-	-	-	-	-	-	94	113	-	-	-	-	-	-	48	83	304	342	8	22	454	560	1014	1014		
WAMI	-	-	-	-	-	-	17	3	-	-	-	-	-	-	-	-	-	-	-	-	17	3	20	20		
COL OF AGRICULTURE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Agriculture	-	-	-	-	-	-	-	-	-	-	1	-	1	-	3	1	127	38	-	-	132	39	171	171		
Agr Term	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	1	19	1	20	20		
Agr Business	-	-	-	-	-	-	-	-	1	-	34	4	30	9	41	3	15	2	-	-	121	18	139	139		
Agr Education	-	-	-	-	-	-	-	-	2	-	2	-	2	1	1	-	4	-	-	-	11	1	12			
Tchg, Brfld	-	-	-	-	-	-	-	-	-	-	10	1	9	1	10	2	6	2	-	-	35	6	41			
Major	-	-	-	-	-	-	-	-	-	-	1	1	3	1	2	2	2	-	-	-	8	4	12			
TOTAL AGED	-	-	-	-	-	-	-	-	2	-	13	2	14	3	13	4	12	2	-	-	54	11	65	65		
Agr Production	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ag Econ	-	-	-	-	-	-	-	-	-	-	6	-	7	-	7	-	3	-	-	-	23	-	23			
Agrom	-	-	-	-	-	-	-	-	3	2	16	6	17	4	14	4	5	-	-	-	55	16	71			
An Sci	-	-	-	-	-	-	-	-	2	-	31	8	17	8	19	8	7	6	-	-	76	30	106			
Hch Ag	-	-	-	-	-	-	-	-	-	-	15	-	7	-	10	-	7	-	-	-	39	-	39			
Pl Prot	-	-	-	-	-	-	-	-	-	-	2	-	1	1	1	1	-	-	-	-	4	2	6			
Ra S	-	-	-	-	-	-	-	-	2	-	20	3	7	1	7	2	2	1	-	-	38	7	45			
RAM	-	-	-	-	-	-	-	-	1	-	10	8	8	8	4	2	5	2	-	-	28	20	48			
Land Res	-	-	-	-	-	-	-	-	2	-	1	6	4	6	3	3	2	-	-	-	12	13	25			
TOTAL AG P	-	-	-	-	-	-	-	-	10	-	2	101	31	68	26	65	20	31	9	-	275	88	363	363		
Agr Science	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ag Econ	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	1			
An Sci	-	-	-	-	-	-	-	-	1	-	9	6	5	5	3	5	2	-	-	-	20	16	36			
Crops	-	-	-	-	-	-	-	-	1	-	3	1	-	1	3	-	-	-	-	-	7	3	10			
Pl Prot	-	-	-	-	-	-	-	-	-	-	2	1	-	-	2	-	-	-	-	-	4	2	6			
Ra S	-	-	-	-	-	-	-	-	-	-	4	-	3	-	2	1	3	-	-	-	12	1	13			
RAM	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	1	1	2			
Soils	-	-	-	-	-	-	-	-	1	-	7	3	10	2	-	2	-	-	-	-	18	7	25			
TOTAL AG S	-	-	-	-	-	-	-	-	3	-	26	11	19	8	10	9	5	2	-	-	63	30	93	93		
Industrial Arts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Major	-	-	-	-	-	-	-	-	2	-	5	-	6	-	14	1	17	2	-	-	44	3	47			
Industries	-	-	-	-	-	-	-	-	-	-	4	-	4	-	1	-	3	-	-	-	12	-	12			
Brfld Tchg	-	-	-	-	-	-	-	-	-	-	2	-	2	-	1	-	3	-	-	-	7	-	7			
Teaching	-	-	-	-	-	-	-	-	3	-	10	-	4	-	5	-	2	-	-	-	25	-	25			
TOTAL I A	-	-	-	-	-	-	-	-	5	-	21	-	16	-	21	1	25	2	-	-	88	3	91	91		
Pro-Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	2	7			
Pro-Vet	-	-	-	-	-	-	-	-	1	-	3	1	11	9	12	7	29	35	-	-	56	52	108	108		
TOTAL COL AGRICULTURE	-	-	-	-	-	-	-	-	22	-	2	199	49	159	55	166	45	267	93	-	813	244	1057	1057		
COL OF EDUCATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Elem Educ	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	4	3	3	-	-	4	10	14			
Elem Ind Ed	-	-	-	-	-	-	-	-	-	-	1	9	82	6	48	7	52	10	85	-	32	268	300			
Lib Sci	-	-	-	-	-	-	-	-	-	-	-	-	5	-	6	-	-	-	-	-	-	20	20			
Music	-	-	-	-	-	-	-	-	-	-	-	-	2	10	-	3	-	1	6	-	3	21	24			
TOTAL EDEL	-	-	-	-	-	-	-	-	-	-	1	11	99	6	58	8	64	14	97	-	39	319	358	358		
P E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hlth Ed	-	-	-	-	-	-	-	-	1	-	9	8	3	6	2	6	10	6	-	-	25	26	51			
Pre-Phyo Th	-	-	-	-	-	-	-	-	-	-	4	1	-	2	1	3	5	19	-	-	10	25	35			
Rec	-	-	-	-	-	-	-	-	-	-	1	-	2	2	1	6	3	6	-	-	7	14	21			
K-12	-	-	-	-	-	-	-	-	-	-	1	16	3	15	10	21	9	21	-	-	23	73	96			
Sec Sch	-	-	-	-	-	-	-	-	1	-	7	9	10	3	8	11	9	16	-	-	34	40	74			
TOTAL P E	-	-	-	-	-	-	-	-	1	-	1	22	34	18	28	22	47	36	68	-	99	178	277	277		
Home Economics	-	-	-	-	-	-	-	-	-	-	1	18	1	28	2	63	-	86	-	-	4	195	199			
Business	-	-	-	-	-	-	-	-	-	-	7	-	2	-	4	-	-	-	-	-	-	14	14			
Child D/FL	-	-	-	-	-	-	-	-	-	-	1	18	2	4	1	3	-	-	-	-	4	25	29			
Instr P Mgmt	-	-	-	-	-	-	-	-	-	-	1	-	7	-	-	-	-	-	-	-	1	7	8			
Ed & Exten	-	-	-	-	-	-	-	-	-	-	-	23	-	5	-	2	-	-	-	-	-	30	30			
Pam Life	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	2			
TOTAL H EC	-	-	-	-	-	-	-	-	1	-	2	74	3	39	3	72	-	88	-	-	9	273	282	282		
Sec Educ	-	-	-	-	-	-	-	-	-	-	3	2	3	1	2	-	2	3	-	-	10	6	16			
Gen Science	-	-	-	-	-	-	-	-	-	-	1	8	4	2	1	-	-	2	-	-	12	6	18			
Phya Science	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2	-	2			
Soc Studies	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	1	2	5	4	-	8	8	16			
TOTAL EDSD	-	-	-	-	-	-	-	-	-	-	1	12	7	7	3	4	2	9	7	-	32	70	52	52		
TOTAL COL EDUCATION	-	-	-	-	-	-	-	-	-	-	2	3	47	214	34	128	37	185	59	260	-	179	790	969	969	
COL OF ENGINEERING	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ag Engr	-	-	-	-	-	-	-	-	3	-	11	-	9	2	15	1	23	2	-	-	61	5	66	66		
Chem Engr	-	-	-	-	-	-	-	-	-	-	52	10	47	8	56	12	70	26	-	-	225	56	281	281		
Civil Engr	-	-	-	-	-	-	-	-	6	-	2	74	2	46	9	46	5	91	5	-	263	23	286	286		
Computer Sci	-	-	-	-	-	-	-	-	4	-	1	9	4	13	6	16	3	27	13	-	69	27	96	96		
Con Engr Tech	-	-	-	-	-	-	-	-	-	-	1	32	-	30	-	43	-	47	1	-	153	1	154	154		
Elect En																										

REPORT 1
 PAGE 2
 2-77

COLLEGE/CURRICULUM/OPT	DOC(9)		HAS(R)		EST		NUN(6)		2ND (5)		SR (4)		JR (3)		SOPH(2)		FROSH(1)		BPEC'L		TOTAL	SUB	GRAND
	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W			
COL OF LBS & SCIENCE																							
Botany	-	-	-	-	-	-	-	-	2	-	4	2	3	-	1	3	5	7	-	-	15	12	27
Biology Tchrs	-	-	-	-	-	-	-	-	-	-	6	4	3	3	3	2	3	2	-	-	13	11	26
TOTAL BOT	-	-	-	-	-	-	-	-	2	-	10	6	6	3	4	5	8	9	-	-	30	23	53
Chemistry	-	-	-	-	-	-	-	-	1	-	6	2	3	2	6	1	3	4	-	-	19	9	28
Professional	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	4	-	-	-	5	1	6
Interdiscipln	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	3	-	2	-	-	2	6	8
Lab	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Teaching	-	-	-	-	-	-	-	-	1	-	1	-	-	-	1	-	-	-	-	-	2	1	3
TOTAL CHEM	-	-	-	-	-	-	-	-	2	1	9	4	4	2	7	4	7	6	-	-	29	17	46
Earth Science	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	5	3	-	-	15	4	19
Geography	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	2	2	4
Geog Plannng	-	-	-	-	-	-	-	-	-	-	10	3	3	-	-	-	-	2	-	-	14	5	19
Geology	-	-	-	-	-	-	-	-	1	2	12	5	12	5	7	3	15	1	-	-	47	16	63
Geophysics	-	-	-	-	-	-	-	-	1	-	1	-	3	-	-	-	-	-	-	-	7	-	7
Metereology	-	-	-	-	-	-	-	-	1	-	7	1	-	-	3	1	1	3	-	-	11	5	16
Teaching	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1
TOTAL ESCI	-	-	-	-	-	-	-	-	3	3	33	10	22	6	17	4	22	9	-	-	97	32	129
Economics	-	-	-	-	-	-	-	-	-	-	1	-	8	3	7	2	5	1	-	-	24	7	31
General	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	3	-	3
Econ Science	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Natural Res	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	3	-	3
TOTAL ECON	-	-	-	-	-	-	-	-	1	-	11	3	8	2	7	1	3	1	-	-	30	7	37
English	-	-	-	-	-	-	-	-	1	3	2	2	3	3	1	2	4	-	-	-	10	11	21
Literature	-	-	-	-	-	-	-	-	1	-	2	8	4	2	2	2	5	8	-	-	14	20	34
Lit & Com Tch	-	-	-	-	-	-	-	-	-	-	4	6	3	10	3	9	3	9	-	-	13	36	47
TOTAL ENGL	-	-	-	-	-	-	-	-	1	1	9	16	9	15	8	12	10	21	-	-	37	65	102
Entomology	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
Fish & Wild Life	-	-	-	-	-	-	-	-	5	-	27	5	20	4	25	4	44	17	-	-	121	70	151
Political Science	-	-	-	-	-	-	-	-	5	1	5	2	4	2	7	4	-	-	-	-	21	9	30
Political Sci	-	-	-	-	-	-	-	-	-	-	2	2	2	2	1	1	-	-	-	-	5	5	10
Prelaw	-	-	-	-	-	-	-	-	1	-	8	2	7	5	8	5	20	8	-	-	44	20	64
Public Admin	-	-	-	-	-	-	-	-	1	2	1	4	3	-	-	1	2	1	-	-	8	7	15
Policy Science	-	-	-	-	-	-	-	-	1	1	-	-	-	-	1	-	-	-	-	-	2	3	5
TOTAL POLS	-	-	-	-	-	-	-	-	1	1	18	7	18	13	14	9	29	14	-	-	80	44	124
History	-	-	-	-	-	-	-	-	-	-	7	2	6	2	4	4	2	8	-	-	19	16	35
Teaching	-	-	-	-	-	-	-	-	-	-	6	4	8	5	2	1	2	4	-	-	18	14	32
TOTAL HIST	-	-	-	-	-	-	-	-	-	-	13	6	14	7	6	5	4	12	-	-	37	30	67
Math	-	-	-	-	-	-	-	-	-	-	7	-	8	2	4	2	8	8	-	-	27	12	39
Statistics	-	-	-	-	-	-	-	-	-	-	3	-	1	1	2	-	2	2	-	-	8	3	11
Teaching	-	-	-	-	-	-	-	-	-	-	2	5	4	4	2	2	4	4	-	-	12	15	27
TOTAL MATH	-	-	-	-	-	-	-	-	-	-	12	5	13	7	8	4	14	14	-	-	47	30	77
Microbiology	-	-	-	-	-	-	-	-	2	1	5	9	6	4	7	8	6	8	-	-	26	30	56
Env Health	-	-	-	-	-	-	-	-	1	-	2	1	5	2	2	3	2	-	-	-	13	7	20
Med Tech	-	-	-	-	-	-	-	-	1	-	9	20	9	12	4	15	1	35	-	-	24	82	106
TOTAL MB	-	-	-	-	-	-	-	-	4	1	16	30	20	18	13	25	10	45	-	-	63	119	182
Modern Langs	-	-	-	-	-	-	-	-	1	-	2	6	1	6	1	1	1	6	-	-	6	19	25
Teaching	-	-	-	-	-	-	-	-	-	-	2	6	-	2	-	-	-	-	-	-	2	9	11
TOTAL M L	-	-	-	-	-	-	-	-	1	-	4	12	1	8	1	1	1	7	-	-	8	28	36
Philosophy	-	-	-	-	-	-	-	-	-	-	2	-	1	-	1	1	-	-	-	-	4	1	5
Physics	-	-	-	-	-	-	-	-	2	-	-	-	-	-	6	-	4	1	-	-	17	1	18
Professional	-	-	-	-	-	-	-	-	-	-	2	1	4	-	4	2	8	-	-	-	18	3	21
Interdiscipln	-	-	-	-	-	-	-	-	-	-	3	-	3	-	1	1	1	-	-	-	8	1	9
Teaching	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1
TOTAL PHYS	-	-	-	-	-	-	-	-	2	-	7	1	10	-	12	3	13	1	-	-	44	5	49
Pre-Medicine	-	-	-	-	-	-	-	-	-	-	9	5	20	2	19	2	48	22	-	-	96	31	127
Psychology	-	-	-	-	-	-	-	-	1	1	8	11	13	9	3	9	12	23	-	-	37	53	90
General	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	1	2	2
TOTAL PSYCH	-	-	-	-	-	-	-	-	1	1	8	12	14	9	3	9	12	23	-	-	38	56	92
Sociology	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soc	-	-	-	-	-	-	-	-	-	-	5	6	5	9	3	3	3	9	-	-	16	27	43
Rural Soc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1
Social Work	-	-	-	-	-	-	-	-	1	-	7	14	4	12	4	22	2	32	-	-	18	80	98
Social Justice	-	-	-	-	-	-	-	-	1	-	2	12	13	16	8	15	27	24	-	-	51	67	118
Anthropology	-	-	-	-	-	-	-	-	3	1	4	1	1	-	-	3	-	3	-	-	8	8	16
Soc Res	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2	2
TOTAL SOC	-	-	-	-	-	-	-	-	5	3	18	33	23	37	15	44	32	68	-	-	93	185	278
Speech	-	-	-	-	-	-	-	-	-	-	1	3	2	2	2	4	1	8	-	-	6	17	23
General	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	2	1	3
Education	-	-	-	-	-	-	-	-	-	-	1	1	3	1	8	-	6	-	-	-	2	20	22
Preprof	-	-	-	-	-	-	-	-	-	-	3	3	1	2	2	4	2	10	-	-	8	19	27
Pub Rel	-	-	-	-	-	-	-	-	-	-	1	6	10	4	12	4	10	4	24	-	18	57	75
TOTAL SPCH	-	-	-	-	-	-	-	-	-	-	10	9	8	5	5	2	12	4	-	-	35	20	55
Zoology	-	-	-	-	-	-	-	-	-	-	1	1	3	1	-	3	1	3	-	-	4	9	13
Pre-Pharm	-	-	-	-	-	-	-	-	-	-	1	10	10	11	6	5	5	13	7	-	39	29	68
TOTAL ZOO	-	-	-	-	-	-	-	-	-	-	1	10	10	11	6	5	5	13	7	-	39	29	68
TOTAL COL L & S	-	-	-	-	-	-	-	-	-	-	28	13	222	175	219	151	169	146	-	-	912	787	1699

COLLEGE/CURRICULUM/OUT	DOC(9)		HAS(8)		EST		NON(6)		2ND (5)		SR (4)		JR (3)		SOPH(2)		FRESH(1)		SPEC'L		TOTAL		SUB		GRAND	
	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W
COL OF ART & ARCH																										
Architecture	-	-	-	-	-	-	-	-	14	3	77	6	39	4	39	4	99	27	-	-	268	44	312	312		
Art	-	-	-	-	-	-	-	-	1	-	3	10	1	12	8	20	21	56	-	-	34	98	132			
Prof Design	-	-	-	-	-	-	-	-	-	-	9	9	15	13	12	16	4	5	-	-	40	43	83			
Fine Arts	-	-	-	-	-	-	-	-	2	7	8	10	2	3	2	2	2	2	-	-	22	16	38			
History	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	-	-	3	3				
Education	-	-	-	-	-	-	-	-	2	3	1	2	1	1	1	1	1	1	-	-	5	6	11			
Educ. K-12	-	-	-	-	-	-	-	-	3	3	1	1	2	-	-	-	1	-	-	-	6	5	11			
TOTAL ART	-	-	-	-	-	-	-	-	1	3	24	33	28	30	26	40	28	65	-	-	107	171	278	278		
F&TV	-	-	-	-	-	-	-	-	1	-	10	3	5	2	8	4	33	17	-	-	57	26	83			
Motion Pict	-	-	-	-	-	-	-	-	12	2	14	2	3	1	7	6	-	-	-	-	36	11	47			
Television	-	-	-	-	-	-	-	-	9	5	5	3	11	3	5	3	-	-	-	-	30	14	44			
Photography	-	-	-	-	-	-	-	-	3	1	19	12	19	3	8	10	5	6	-	-	54	32	86			
TOTAL F&TV	-	-	-	-	-	-	-	-	4	1	30	22	43	10	30	18	50	32	-	-	177	83	260	260		
Music Educ	-	-	-	-	-	-	-	-	4	1	2	-	1	3	14	19	-	-	-	-	21	23	44			
School	-	-	-	-	-	-	-	-	9	5	6	9	10	3	5	2	-	-	-	-	30	19	49			
Studio Tech	-	-	-	-	-	-	-	-	1	-	1	1	1	1	1	1	-	-	-	-	2	3	5			
K-12, Refd	-	-	-	-	-	-	-	-	3	4	1	-	1	-	-	-	3	-	-	-	5	7	12			
TOTAL MUS	-	-	-	-	-	-	-	-	1	16	10	10	10	12	7	20	24	-	-	-	58	52	110	110		
Theatre	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Theatre Arts	-	-	-	-	-	-	-	-	-	-	1	2	-	2	1	3	6	-	-	-	7	8	15			
Teaching	-	-	-	-	-	-	-	-	-	-	2	1	1	-	1	-	2	-	-	-	1	6	7			
TOTAL THTR	-	-	-	-	-	-	-	-	-	-	3	3	1	2	2	3	8	-	-	-	8	14	22	22		
TOTAL COL ART & ARCH	-	-	-	-	-	-	-	-	19	8	167	74	123	55	109	71	200	156	-	-	618	364	982	982		
SCHOOL OF BUSINESS																										
Business	-	-	-	-	-	-	-	-	1	2	4	2	7	5	19	11	15	20	-	-	46	40	86			
Accounting	-	-	-	-	-	-	-	-	4	3	31	22	26	26	37	45	60	104	-	-	158	200	358			
Bus Ed, Basic	-	-	-	-	-	-	-	-	2	2	2	2	2	2	1	2	3	-	-	-	8	8	16			
Bus Ed, Of Ed	-	-	-	-	-	-	-	-	1	10	-	-	11	-	2	-	5	-	-	-	1	28	29			
Distrib Ed	-	-	-	-	-	-	-	-	1	5	2	-	2	2	3	5	-	-	-	-	8	12	20			
Finance	-	-	-	-	-	-	-	-	3	1	41	15	32	11	30	11	27	10	-	-	133	48	181			
Management	-	-	-	-	-	-	-	-	2	-	27	3	34	10	40	18	79	22	-	-	182	53	235			
Marketing	-	-	-	-	-	-	-	-	10	13	10	10	14	16	22	15	-	-	-	-	56	54	110			
Office Admin	-	-	-	-	-	-	-	-	-	-	7	-	6	-	10	2	19	-	-	-	2	42	44			
2 Yr Sec Prog	-	-	-	-	-	-	-	-	-	-	-	-	3	-	21	2	30	-	-	-	2	54	56			
TOTAL SCHL BUSINESS	-	-	-	-	-	-	-	-	10	6	117	79	113	84	144	137	212	233	-	-	596	539	1135	1135		
SCHOOL OF NURSING																										
Nursing	-	-	-	-	-	-	-	-	11	25	19	197	20	155	7	122	15	175	-	-	72	674	746	746		
COL OF GRAD STUDIES																										
Applied Econ	1	-	12	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	2	15	15		
As Educ	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2	2		
As Engr	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2	2		
Astronomy	-	-	15	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	1	16	16		
Art	-	-	7	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	3	10	10		
Art	-	-	9	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	10	19	19		
Bio Chem	1	-	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	2	8	8		
Botany	1	-	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	1	6	6		
Business Ed	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	4	4		
Chem Engr	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	-	14	14		
Chemistry	9	-	7	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	3	19	19		
Civil Engr	3	-	25	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	1	29	29		
Crop & Soil S	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	9	9		
Earth Sci	-	-	12	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	4	16	16		
Education																										
Adult & High	18	6	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	8	28			
Curr & Inetr	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	4			
Elem Admin	1	1	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5	7			
El Cur & Inat	1	2	1	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	12	14			
Gen Sch Admin	5	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	1	7			
Guid & Counsel	-	2	11	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	19	30			
Sec Admin	-	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	3			
Sec Tchrs	-	-	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	10			
TOTAL EDUC	28	12	21	41	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	53	103	103		
Elect Engr	2	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	13	13		
Entomology	-	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	4	4		
F&W	-	-	15	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	4	19	19		
History	-	-	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	10	10		
Home Ec	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	5	6	6		
IME	-	-	9	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	3	12	12		
Math	12	2	7	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	6	25	25		
Mech Engr	2	-	8	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	1	11	11		
Microbiology	4	1	15	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	8	27	27		
Nursing	-	-	3	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	10	13	13		
P E	-	-	5	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	10	15	15		
Phys	10	3	10	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	4	24	24		
Plant Path	2	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	2	7	7		
Psychology	-	-	7	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	2	9	9		
Pub Admin	-	-	16	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	6	22	22		
R																										

NUMBER AND RANK OF MALE AND FEMALE FACULTY AT MONTANA STATE UNIVERSITY, JANUARY,
1978. MONTANA STATE UNIVERSITY PERSONNEL SERVICES MANAGEMENT REPORT SYSTEM.

Department	Total		Full Professor		Associate Professor		Assistant Professor		Instructor	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
School of Business	22	3	2	0	7	0	12	1	1	2
School of Nursing	0	40	0	5	0	12	0	23	0	0
Agricultural Economics and Economics	17	1	7	0	6	0	4	0	0	1
Industrial Education	7	0	4	0	2	0	1	0	0	0
Plant Pathology	5	0	4	0	0	0	1	0	0	0
Animal and Range Sciences	16	0	8	0	6	0	2	0	0	0
Plant and Soil Sciences	19	0	11	0	5	0	3	0	0	0
Veterinary Science	6	0	3	0	3	0	0	0	0	0
Physical Education	11	5	2	0	4	3	4	0	1	2
Educational Services	3	2	1	0	1	0	1	2	0	0
Elementary Education	6	0	0	0	2	0	4	0	0	0
Secondary Education	5	2	0	0	3	0	1	2	1	0
Home Economics	2	15	0	2	2	5	0	5	0	3
Chemical Engineering	6	0	4	0	2	0	0	0	0	0
Civil Engineering and Engineering										
Mechanics	16	0	7	0	7	0	2	0	0	0
Electrical Engineering	15	0	9	0	4	0	2	0	0	0
Industrial Engin- eering and Computer Science	7	0	1	0	3	0	1	0	2	0
Mechanical Engineering	14	0	4	0	3	0	7	0	0	0

APPENDIX B
181

NUMBER AND RANK OF MALE AND FEMALE FACULTY AT MONTANA STATE UNIVERSITY, JANUARY,
1978. MONTANA STATE UNIVERSITY PERSONNEL SERVICES MANAGEMENT REPORT SYSTEM,
(CONTINUED).

Department	Total		Full Professor		Associate Professor		Assistant Professor		Instructor	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Agricultural										
Engineering	14	0	4	0	3	0	7	0	0	0
Microbiology	9	0	6	0	1	0	0	0	2	0
Chemistry	21	0	14	0	6	0	1	0	0	0
Political Science	4	0	0	0	3	0	1	0	0	0
English	14	3	2	0	8	0	4	3	0	0
Earth Sciences	10	0	5	0	2	0	3	0	0	0
History, Government and Philosophy	16	0	8	0	4	0	4	0	0	0
Mathematics	22	0	8	0	7	0	7	0	0	0
Psychology	8	0	3	0	2	0	3	0	0	0
Modern Languages	4	2	0	0	2	1	2	1	0	0
Physics	12	1	5	1	6	0	1	0	0	0
Biology	22	3	11	0	8	1	3	1	0	1
Medical Science	1	0	1	0	0	0	0	0	0	0
Speech	8	0	3	0	4	0	1	0	0	0
Sociology	14	3	2	0	8	0	3	3	1	0
Architecture	10	2	6	1	2	0	1	0	1	1
Art	11	2	3	1	4	0	1	1	3	0
Theatre Arts	3	0	0	0	1	0	2	0	0	0
Film & T.V.	10	0	1	0	2	0	6	0	1	0
Music	12	2	4	0	2	0	5	2	1	0
Education	4	1	3	1	1	0	0	0	0	0
Graduate Studies	1	0	1	0	0	0	0	0	0	0
Library	2	15	0	0	0	4	2	5	0	6

NUMBER AND RANK OF MALE AND FEMALE FACULTY AT MONTANA STATE UNIVERSITY, JANUARY,
1978. MONTANA STATE UNIVERSITY PERSONNEL SERVICES MANAGEMENT REPORT SYSTEM,
(CONTINUED).

Department	Total		Full Professor		Associate Professor		Assistant Professor		Instructor	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Engineering	3	0	3	0	0	0	0	0	0	0
CES	95	30	8	0	28	3	28	8	31	19
AES	27	1	6	0	9	0	8	1	4	0
Testing and Counseling	3	1	1	0	1	1	1	0	0	0
TOTAL	527	134	175	11	171	30	132	58	49	35

184
APPENDIX C

Table 1

The Attitudes Toward Women Scale (AWS) and Its Scoring Key

(The most conservative alternative, scored 0, is shown)

ATTITUDES TOWARD WOMEN

The statements listed below describe attitudes toward the role of women in society which different people have. There are no right or wrong answers, only opinions. You are asked to express your feelings about each statement by indicating whether you (A) Agree strongly, (B) Agree mildly, (C) Disagree mildly, or (D) Disagree strongly. Please indicate your opinion by marking the column on the answer sheet which corresponds to the alternative which best describes your personal attitude. Please respond to every item.

(A) Agree strongly (B) Agree mildly (C) Disagree mildly (D) Disagree strongly

Response
keyed 0

- | | |
|----|---|
| AS | 1. Women have an obligation to be faithful to their husbands. |
| AS | 2. Swearing and obscenity is more repulsive in the speech of a woman than a man. |
| AS | 3. The satisfaction of her husband's sexual desires is a fundamental obligation of every wife. |
| DS | 4. Divorced men should help support their children but should not be required to pay alimony if their wives are capable of working. |
| AS | 5. Under ordinary circumstances, men should be expected to pay all the expenses while they're out on a date. |
| DS | 6. Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day. |
| DS | 7. It is all right for wives to have an occasional, casual, extramarital affair. |
| DS | 8. Special attentions like standing up for a woman who comes into a room or giving her a seat on a crowded bus are outmoded and should be discontinued. |
| DS | 9. Vocational and professional schools should admit the best qualified students, independent of sex. |

Response
keyed 0

- DS 10. Both husband and wife should be allowed the same grounds for divorce.
- AS 11. Telling dirty jokes should be mostly a masculine prerogative.
- DS 12. Husbands and wives should be equal partners in planning the family budget.
- AS 13. Men should continue to show courtesies to women such as holding open the door or helping them on with their coats.
- DS 14. Women should claim alimony not as persons incapable of self-support but only when there are children to provide for or when the burden of starting life anew after the divorce is obviously heavier for the wife.
- AS 15. Intoxication among women is worse than intoxication among men.
- AS 16. The initiative in dating should come from the man.
- DS 17. Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry.
- DS 18. It is insulting to women to have the "obey" clause remain in the marriage service.
- DS 19. There should be a strict merit system in job appointment and promotion without regard to sex.
- DS 20. A woman should be as free as a man to propose marriage.
- DS 21. Parental authority and responsibility for discipline of the children should be equally divided between husband and wife.
- AS 22. Women should worry less about their rights and more about becoming good wives and mothers.
- DS 23. Women earning as much as their dates should bear equally the expense when they go out together.
- DS 24. Women should assume their rightful place in business and all the professions along with men.
- AS 25. A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.
- AS 26. Sons in a family should be given more encouragement to go to college than daughters.

Response
keyed 0

- | | |
|----|--|
| AS | 27. It is ridiculous for a woman to run a locomotive and for a man to darn socks. |
| AS | 28. It is childish for a woman to assert herself by retaining her maiden name after marriage. |
| DS | 29. Society should regard the services rendered by the women workers as valuable as those of men. |
| AS | 30. It is only fair that mail workers should receive more pay than women even for identical work. |
| AS | 31. In general, the father should have greater authority than the mother in the brining up of children. |
| AS | 32. Women should be encouraged not to become sexually intimate with anyone before marriage, even their fiances. |
| DS | 33. Women should demand money for household and personal expenses as a right rather than as a gift. |
| DS | 34. The husband should not be favored by law over the wife in the disposal of family property or income. |
| DS | 35. Wifely submission is an outworn virtue. |
| AS | 36. There are some professions and types of businesses that are more suitable for men than women. |
| AS | 37. Women should be concerned with their duties of childrearing and house-tending, rather than with desires for professional and business careers. |
| AS | 38. The intellectual leadership of a community should be largely in the hands of men. |
| AS | 39. A wife should make every effort to minimize irritation and inconvenience to the male head of the family. |
| DS | 40. There should be no greater barrier to an unmarried woman having sex with a casual acquaintance than having dinner with him. |
| DS | 41. Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set by men. |
| AS | 42. Women should take the passive role in courtship. |
| AS | 43. On the average, women should be regarded as less capable of contribution to economic production than are men. |

Response
keyed 0

- DS 44. The intellectual equality of woman with man is perfectly obvious.
- DS 45. Women should have full control of their persons and give or withhold sex intimacy as they choose.
- AS 46. The husband has in general no obligation to inform his wife of his financial plans.
- AS 47. There are many jobs in which men should be given preference over women in being hired or promoted.
- AS 48. Women with children should not work outside the home if they don't have to financially.
- DS 49. Women should be given equal opportunity with men for apprenticeship in the various trades.
- DS 50. The relative amounts of time and energy to be devoted to household duties on the one hand and to a career on the other should be determined by personal desires and interests rather than by sex.
- AS 51. As head of the household, the husband should have more responsibility for the family's financial plans than his wife.
- DS 52. If both husband and wife agree that sexual fidelity isn't important, there's no reason why both shouldn't have extramarital affairs if they want to.
- AS 53. The husband should be regarded as the legal representative of the family group in all matters of law.
- DS 54. The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy.
- AS 55. Most women need and want the kind of protection and support that men have traditionally given them.

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APPENDIX D

FACILITATORS:

This questionnaire is designed to examine conscious and unconscious sexist behavior in academic advising. Please instruct the students to not disclose the content of the questionnaire and preferably not disclose it's use. Other students may be seeing the same faculty member and the research may be contaminated if the faculty members are aware they are being rated at this time. Also caution the students to not discuss the questions with other students.

In your small groups discuss the nature of the questionnaire and ask that each of the members of the group choose two faculty members to interview before our next meeting. Students should be encouraged to select a faculty member from the list provided; however, if they choose to see a faculty member from a curriculum not represented, that is okay. Either way we would like to have them complete the questionnaire. (These faculty members are volunteers from the parallel study and would prefer they be seen by the students if at all possible.)

It is best if the students make appointments with the faculty member rather than just "dropping in." Give them the telephone number and building at which the faculty member may be reached. Have the students return the questionnaires to you next week.

Inadvertently a mistake was made on the questionnaire. The SA standing for Strongly Agree is directly under the item number. Please point this out to the students reminding them that there are 4 possible responses to each question.

THANKYOU.

APPENDIX E

STUDENT-ADVISOR RATING SCALE

Student's Name _____

Age _____

Sex _____

Curriculum _____

Name of Faculty Member _____

DIRECTIONS:

Many of the questions in this questionnaire can be answered by checking the degree of agreement you have with each statement. An example is provided for your assistance:

EXAMPLE

Men and Women are physically different.

Strongly Agree	Agree	Disagree	Strongly Disagree
<u>SA</u>	A	D	SD

1. It was easy to see this faculty member.

SA	A	D	SD
----	---	---	----

2. The faculty member kept his/her appointment (when made in advance).

yes no

3. The faculty member was prompt for our meeting.

yes no

4. I talked to the faculty member _____ minutes.

5. I spoke to the faculty member _____ % of the time. The faculty member spoke to me _____ % of the time during our meeting. (Should equal 100%).

6. The faculty member made a remark or remarks which made me feel as if he/she were doing me a favor in seeing me.

SA	A	D	SD
----	---	---	----

7. The faculty member did not put down what he/she was doing when I came in and turn his/her attention to me completely.

SA	A	D	SD
----	---	---	----

8. The faculty member acted cold and distant and paid little attention to what I was saying.

SA	A	D	SD
----	---	---	----

	Strongly Agree SA	Agree A	Disagree D	Strongly Disagree SD
9. The faculty member made me feel as if I was wasting his/her time. He/She fiddled with their pen, shuffled papers and doodled during the interview.	SA	A	D	SD
10. The faculty member listened to me.	SA	A	D	SD
11. I felt that I was talked <u>to</u> by the faculty member rather than being talked <u>with</u> during this meeting.	SA	A	D	SD
12. The faculty member interrupted me as I talked and took over the conversation.	SA	A	D	SD
13. The faculty member talked more about themselves or other things than about me and my questions and concerns.	SA	A	D	SD
14. The faculty member kept throwing in funny remarks when I was trying to be serious.	SA	A	D	SD
15. I liked the faculty member as a person.	SA	A	D	SD
16. The faculty member seemed to be "talking down" to me in a condescending manner.	SA	A	D	SD
17. The faculty member demonstrated a relaxed body position during the interview.	SA	A	D	SD
18. The faculty member closed the door to their office during our meeting.	SA	A	D	SD
19. The faculty member seemed rushed for time, for example, made comments about their "busy day".	SA	A	D	SD

	Strongly Agree SA	Agree A	Disagree D	Strongly Disagree SD
20. The faculty member allowed interruptions to take place during the interview, for example, incoming calls and people "stopping by".	SA	A	D	SD
21. I felt at ease with the faculty member.	SA	A	D	SD
22. The faculty member treated me like an adult.	SA	A	D	SD
23. The faculty member maintained good eye contact during the session.	SA	A	D	SD
24. The faculty member encouraged me.	SA	A	D	SD
25. The faculty member made jokes or comments with a sexual overtone.	SA	A	D	SD
26. The faculty member looked at his/her watch several times during our interview.	SA	A	D	SD
27. The faculty member helped me to explore non-traditional as well as traditional curriculums and career choices.	SA	A	D	SD
28. When discussing non-traditional career choices the faculty member emphasized problems and difficulties I might face in a career not normally associated with my sex.	SA	A	D	SD
29. The faculty member asked questions of me concerning my plans for marriage and family.	SA	A	D	SD
30. The faculty member discouraged me from considering a career in a field dominated by the opposite sex.	SA	A	D	SD

	Strongly Agree	Agree	Disagree	Strongly Disagree
	SA	A	D	SD
31. The faculty member gave "advice" almost immediately -- not spending my time exploring the subject, my interests or feelings toward the matter.				
	SA	A	D	SD
32. The faculty member suggested possibilities for advanced degrees in the areas of my interest.				
	SA	A	D	SD
33. I believe I would have been treated differently had I been a member of the opposite sex.				
	SA	A	D	SD
34. The faculty member seemed to understand my point of view.				
	SA	A	D	SD
35. The faculty member was enthusiastic when talking to me.				
	SA	A	D	SD
36. The faculty member referred me to appropriate sources for further information.				
	SA	A	D	SD
37. At the end of the interview the faculty member offered me an opportunity to return for another interview.				
	SA	A	D	SD
38. I would be willing to return to this faculty member for help in the future.				
	SA	A	D	SD

COMMENTS:

APPENDIX F

Student's Name:
 Age:
 Curriculum:
 Sex:

COMPILATION OF QUESTIONS FOR ADVISOR RATING SCALE

Name of Faculty Member: _____

How many times have you met with your advisor: _____

Many of the following questions can be answered by circling the degree of agreement you have with each statement.

(A) (B) (C) (D)
Agree strongly Agree mildly Disagree mildly Disagree strongly

EXAMPLE:

1. Men and women are physically different.

A B C D

2. The advisor leaned forward and looked directly at me during our interview, giving me the feeling I was of primary importance at that particular time to the advisor.

A B C D

3. The advisor acted as though he or she thought my concerns and problems were important.

A B C D

4. I believe the advisor had a genuine desire to be of service to me.

A B C D

5. In our meetings together, my advisor appears warm, interested, and patient with me.

A B C D

6. The advisor offered suggestions which encompassed a number of curriculums.

A B C D

7. The advisor was helpful to me.

A B C D

8. The advisor leaned forward as a means of encouraging the client to engage in good, directed behavior.

A B C D

(A)	(B)	(C)	(D)
<u>Agree strongly</u>	<u>Agree mildly</u>	<u>Disagree mildly</u>	<u>Disagree strongly</u>

9. My advisor respects what I have to say.

A	B	C	D
---	---	---	---
10. My advisor treated me like an adult.

A	B	C	D
---	---	---	---
11. The advisor closed the door during our meeting.

A	B	C	D
---	---	---	---
12. The advisor was very patient.

A	B	C	D
---	---	---	---
13. My advisor referred me to appropriate sources for specialized information.

A	B	C	D
---	---	---	---
14. The advisor encouraged me to think about my future.

A	B	C	D
---	---	---	---
15. The advisor seemed concerned with my questions and concerns.

A	B	C	D
---	---	---	---
16. The advisor appeared receptive to my ideas.

A	B	C	D
---	---	---	---
17. The advisor suggested career options normally reserved for (males/females).

A	B	C	D
---	---	---	---
18. The advisor was more interested in "problem solving" than exploring various alternatives in noncommittal ways.

A	B	C	D
---	---	---	---
19. I asked questions and the advisor gave answers. The advisor did not ask any questions of me giving me little opportunity to share what I know.

A	B	C	D
---	---	---	---
20. The advisor got me off the subject by asking questions and making comments.

A	B	C	D
---	---	---	---
21. My advisor interrupted me as I talked.

A	B	C	D
---	---	---	---
22. The advisor spoke to me as if he or she were lecturing a class.

A	B	C	D
---	---	---	---

- | | (A) | (B) | (C) | (D) |
|---|-----------------------|---------------------|------------------------|--------------------------|
| | <u>Agree strongly</u> | <u>Agree mildly</u> | <u>Disagree mildly</u> | <u>Disagree strongly</u> |
| 23. The advisor treated me as a child, ignoring me while taking phone calls and talking to others. | A | B | C | D |
| 24. The advisor never gave me a chance to talk | A | B | C | D |
| 25. The advisor appeared to be waiting for me to stop talking so he could take over. | A | B | C | D |
| 26. The advisor seemed hurried. | A | B | C | D |
| 27. I feel that my advisor knows me as a person. | A | B | C | D |
| 28. The advisor was withdrawn and did not seem interested in me. | A | B | C | D |
| 29. The advisor shuffled papers or leaned back in chair, giving cues to ending our meeting before I had fully learned what I had wanted to learn. | A | B | C | D |
| 30. The advisor was withdrawn and distant and did not seem interested in me. | A | B | C | D |
| 31. My advisor usually appears so rushed I hesitate to ask many of the questions or to discuss areas which I feel would be helpful to me. | A | B | C | D |
| 32. The advisor did <u>not</u> put down what he or she was doing when I came in and turn attention to me. | A | B | C | D |
| 33. The advisor made me feel at ease and by his or her manner encouraged me to discuss anything which might be helpful to me. | A | B | C | D |
| 34. During the interview, the advisor used several different non-verbal gestures (smiling, head-nodding, hand movement, etc.) to put me at ease. | A | B | C | D |

(A)	(B)	(C)	(D)
<u>Agree strongly</u>	<u>Agree mildly</u>	<u>Disagree mildly</u>	<u>Disagree strongly</u>

35. The advisor made responses that reflect his liking and appreciation of me.

A	B	C	D
---	---	---	---
36. The advisor sat "attentively" while I explained my purpose for the meeting.

A	B	C	D
---	---	---	---
37. The advisor displayed intermittent head movements (up-down, side to side).

A	B	C	D
---	---	---	---
38. The advisor often responded to me with facial animation and alertness.

A	B	C	D
---	---	---	---
39. The advisor's facial expressions reflected my mood.

A	B	C	D
---	---	---	---
40. The advisor displayed several different facial expressions during the interview.

A	B	C	D
---	---	---	---
41. The advisor maintained eye contact with me

A	B	C	D
---	---	---	---
42. The advisor had a poker face and I wasn't sure if he was listening or not.

A	B	C	D
---	---	---	---
43. The advisor never smiled. I was afraid to talk to him or her.

A	B	C	D
---	---	---	---
44. When I need to see my advisor I have little difficulty in setting up an appointment with him or her.

A	B	C	D
---	---	---	---
45. My advisor was patient with me.

A	B	C	D
---	---	---	---
46. The advisor treated me like an adult.

A	B	C	D
---	---	---	---
47. The advisor seemed cold and distant, didn't pay much attention to what I was saying and was rather brisk in his/her manner to me.

A	B	C	D
---	---	---	---

(A)	(B)	(C)	(D)
<u>Agree strongly</u>	<u>Agree mildly</u>	<u>Disagree mildly</u>	<u>Disagree strongly</u>

48. I felt stupid talking to my advisor, as if I didn't know anything.
- A B C D
49. The advisor didn't seem to take personal interest in me. He or she seemed withdrawn and distant.
- A B C D
50. My relationship with my advisor is such that I would not hesitate to seek his/her advice on any subject or problem I might have.
- A B C D
51. I would be willing to return to this advisor for help in the future.
- A B C D
52. The advisor seemed restless while talking to me.
- A B C D
53. The advisor took phone calls, talked to others while I waited during our interview.
- A B C D
54. In opening our conversations, the advisor was relaxed and at ease.
- A B C D
55. The advisor responded to me with facial animation and alertness.
- A B C D
56. I felt the advisor accepted me as an individual.
- A B C D
57. The advisor acted as if he/she had a job to do and didn't care how he/she accomplished it.
- A B C D
58. The advisor made me feel I am important.
- A B C D
59. The advisor looked at me as if sizing me up. I began to wonder if I had dirt on my face or torn clothing, etc.
- A B C D
60. My advisor can be trusted.
- A B C D

- | | (A) | (B) | (C) | (D) |
|---|-----------------------|---------------------|------------------------|--------------------------|
| | <u>Agree strongly</u> | <u>Agree mildly</u> | <u>Disagree mildly</u> | <u>Disagree strongly</u> |
| 61. I distrusted the advisor. | A | B | C | D |
| 62. The advisor encouraged me to ask questions and make comments. | A | B | C | D |
| 63. I felt at ease with the advisor. | A | B | C | D |
| 64. I believe I would have been treated differently had I been a member of the opposite sex. | A | B | C | D |
| 65. My advisor said he/she had to go to another meeting (or class) but only after we had talked awhile. | A | B | C | D |
| 66. Questions were asked concerning the occupation and location of employment of persons close to me, such as boyfriend, girlfriend, spouse, etc. | A | B | C | D |
| 67. The advisor asked questions of me about my future plans concerning marriage and family. | A | B | C | D |
| 68. The advisor gave me "advice" almost immediately, not spending any time explaining the subject, my interests and feelings toward the matter. | A | B | C | D |
| 69. The advisor talked more about him/herself or other things than about me and my questions and concerns. | A | B | C | D |
| 70. The advisor kept throwing in funny remarks when I was trying to be serious. | A | B | C | D |
| 71. The advisor interrupted me as I talked and took over the conversation. It seemed more like a lecture than an interview. | A | B | C | D |
| 72. The advisor seemed rushed for time and made comments about "their busy day." He didn't sit still. | A | B | C | D |

(A)	(B)	(C)	(D)
<u>Agree strongly</u>	<u>Agree mildly</u>	<u>Disagree mildly</u>	<u>Disagree strongly</u>

73. The advisor allowed interruptions to take place during our meeting including incoming calls and people "stopping by."
- A B C D
74. The advisor did not close the door to his/her office during our meeting, making it possible to others to enter unannounced.
- A B C D
75. The advisor shuffled papers and made gestures of ending the interview before I had fully discussed all the areas of concern I had prior to the meeting.
- A B C D
76. I felt stupid talking to my advisor as if I didn't know anything.
- A B C D
77. I felt that I was talked to by the advisor rather than being talked with during the interview.
- A B C D
78. The advisor looked at his/her watch several times during our interview.
- A B C D
79. The advisor made me feel as if I were wasting his time. He or she fiddled around with his/her pen and drew pictures during the interview.
- A B C D
80. The advisor seemed to be "talking down" to me in a condescending manner.
- A B C D
81. The advisor acted cold and distant and paid little attention to what I was saying.
- A B C D
82. The advisor made friendly gestures such as handshaking, smiling, etc., to make me feel comfortable in our meeting and want to stay and talk.
- A B C D
83. My advisor did not put down what he/she was doing when I came in and turn his/her attention to me completely.
- A B C D

(A)	(B)	(C)	(D)
<u>Agree strongly</u>	<u>Agree mildly</u>	<u>Disagree mildly</u>	<u>Disagree strongly</u>

84. The advisor made a remark which made me feel as if he/she were doing me a favor in seeing me.
- A B C D
85. I spoke to the advisor ____% of the time. The advisor spoke to me ____% of the time during our interview.
86. I talked to the advisor approximately ____ minutes.
87. The advisor kept his/her appointment with me when made in advance.
- A B C D
88. It was easy to get in to see this advisor.
- A B C D
89. The advisor seemed much like a "mother" or "father" in the way he/she treated me during the interview.
- A B C D
90. Although I requested a meeting with the Dept. Head, I was scheduled to see another member of the faculty.
- A B C D
91. The advisor helped me to explore non-traditional as well as traditional curriculums and career choices.
- A B C D
92. My advisor discouraged me from considering a career in a field dominated by the opposite sex.
- A B C D
93. When discussing non-traditional career choices, the advisor emphasized problems and difficulties I might face in a career not normally associated with my sex.
- A B C D
94. The advisor suggested possibilities of advanced degrees in the areas of my interest.
- A B C D
95. My advisor referred me to appropriate sources for specialized information.
- A B C D
96. The advisor encouraged me.
- A B C D

(A)	(B)	(C)	(D)
<u>Agree strongly</u>	<u>Agree mildly</u>	<u>Disagree mildly</u>	<u>Disagree strongly</u>

97. The advisor made responses that reflected his/her liking and appreciation of me.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
98. My advisor accepts me as an individual.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
99. The advisor is a person I can trust.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
100. At the end of the interview, the advisor offered me an opportunity to return for another interview.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
101. I doubt that my advisor knows who I am or anything about me.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
102. My advisor appears well informed on course requirements, regulations, etc., and I place a great deal of confidence in any suggestions he makes regarding these matters.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
103. If I had a problem of a personal nature, I wouldn't think of going to my advisor to discuss it.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
104. I usually meet with my advisor at least one or more times a quarter other than at registration.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
105. Although my advisor has fairly definite office hours when he/she is available for advising, he/she is so busy it is almost impossible to see him/her anyway.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
106. My advisor is not only well informed about course requirements and regulations but is sufficiently conscious about my enrollment each quarter that I am not handicapped with enrollment errors.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
107. My advisor seems to know little more about course offerings and regulations than I do.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
108. About the only time I use my advisor is to sign my card at registration and sometimes not even then.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|

(A)	(B)	(C)	(D)
<u>Agree strongly</u>	<u>Agree mildly</u>	<u>Disagree mildly</u>	<u>Disagree strongly</u>

109. Since my advisor is not very knowledgeable or conscientious about his advising responsibilities, I can reasonably expect his to make some kind of enrollment error when I seek his help during pre-enrollment.
- A B C D
110. The advisor refrained from head-nodding when the client did not pursue goal-directed topics.
- A B C D
111. The advisor demonstrated a relaxed body position.
- A B C D
112. The advisor demonstrated some variation in voice pitch when talking.
- A B C D
113. The advisor's voice was easily heard.
- A B C D
114. The advisor used intermittent one-word vocalizations ("mm-hmm") during the interview.
- A B C D
115. The advisor usually spoke slowly enough so that each word was easily understood.
- A B C D
116. The advisor's verbal statements were concise and to the point.
- A B C D
117. The advisor refrained from repetition in his verbal statements.
- A B C D
118. The advisor made verbal comments that pursued the topic which I introduced.
- A B C D
119. The advisor made it possible for me to start working toward a solution to my problems.
- A B C D
120. A clear and sensible progression of topics was evident in the advisor's verbal behavior; the advisor avoided rambling.
- A B C D

(A)	(B)	(C)	(D)
<u>Agree strongly</u>	<u>Agree mildly</u>	<u>Disagree mildly</u>	<u>Disagree strongly</u>

121. The advisor encouraged discussion of statement made by me that challenged the advisor's knowledge and beliefs.

A	B	C	D
---	---	---	---

122. The advisor helped me to develop action steps for goal attainment.

A	B	C	D
---	---	---	---

123. The advisor verbally stated his desire and/or intent to understand.

A	B	C	D
---	---	---	---

124. The advisor suggested alternatives available to me.

A	B	C	D
---	---	---	---

125. The advisor asked me to verbally state my commitment to work for the achievement of a goal.

A	B	C	D
---	---	---	---

126. The advisor and I decided together upon the advising goals.

A	B	C	D
---	---	---	---

127. In starting the interview, the advisor remained silent or invited the client to talk about whatever he wanted, thus leaving the initial topic up to me.

A	B	C	D
---	---	---	---

128. The goals set in the interview were specific and observable.

A	B	C	D
---	---	---	---

129. After the first five minutes of the interviews, the advisor refrained from encouraging social conversation.

A	B	C	D
---	---	---	---

130. After the first topic of discussion was exhausted, the advisor remained silent until I identified a new topic.

A	B	C	D
---	---	---	---

131. The advisor initiated the termination of the interview through the use of some closing strategy such as acknowledgement of time limits and/or summarization.

A	B	C	D
---	---	---	---

132. The advisor insisted on being right always.

A	B	C	D
---	---	---	---

(A)	(B)	(C)	(D)
<u>Agree strongly</u>	<u>Agree mildly</u>	<u>Disagree mildly</u>	<u>Disagree strongly</u>

133. The advisor's comments helped me to see more clearly what I need to do to gain my objectives.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
134. The advisor acted uncertain of himself.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
135. In the first part of the interview, the advisor used different social non-verbal gestures (smiling, head-nodding, hand movements, etc.) to help put the client at ease.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
136. My advisor referred me to appropriate sources for specialized information.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
137. The advisor was enthusiastic when talking to me.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
138. The advisor leaned forward as a means of encouraging me.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
139. The advisor seemed to understand my point of view.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
140. I liked the advisor as a person.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
141. My advisor made me feel at ease by his manner.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
142. I can understand my advisor when he or she explains something to me.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
143. The advisor provided structure (information about nature, purposes of advisory, time limits, etc.) when I indicated uncertainty about the interview.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
144. In our talks, the advisor acted as if he/she were better than I.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|
145. The advisor helped me to learn to make my own decisions.
- | | | | |
|---|---|---|---|
| A | B | C | D |
|---|---|---|---|

(A)	(B)	(C)	(D)
<u>Agree strongly</u>	<u>Agree mildly</u>	<u>Disagree mildly</u>	<u>Disagree strongly</u>

146. The advisor gave the impression of "feeling at ease."
 A B C D
147. The advisor spoke rapidly during our meeting.
 A B C D
148. The advisor knows what he/she is talking about.
 A B C D
149. The advisor's voice was clear but not monotone. It gave me the feeling the advisor was not rushed and would spend as much time with me as needed.
 A B C D
150. The advisor used responses that suggested a course of action I had the potential for completing in the future.
 A B C D
151. I felt satisfied as a result of my talk with the advisor.
 A B C D
152. Several times the advisor used responses that supported or reinforced something I said.
 A B C D
153. Overall, I would rate the advising (check the words below that describe the type of communication that the advisor used during the interview):

☐ ordering	☐ moralizing
☐ directing	☐ preaching
☐ commanding	☐ obliging
☐ warning	☐ giving suggestions
☐ admonishing	☐ finding solutions
☐ threatening	

APPENDIX G

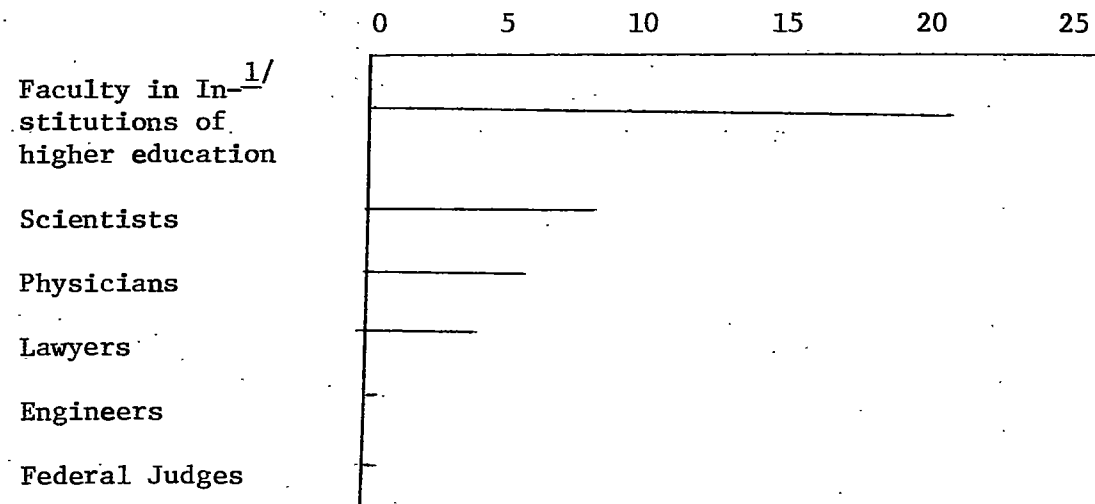
Economic Status of Women: 1974

Major Occupation Group	Income	As percent of men's income
Professional and technical workers	\$9,587	66
Nonfarm managers and administrators	9,195	59
Clerical workers	6,868	60
Sales workers	5,114	41
Operatives (including transport)	5,848	58
Service workers (except private household)	5,206	60

Source: Women's Bureau, U.S. Department of Labor (1974).

WOMEN ARE INADEQUATELY REPRESENTED IN LEADING PROFESSIONS

(Women as Percent of Total Employed, Selected Professions)

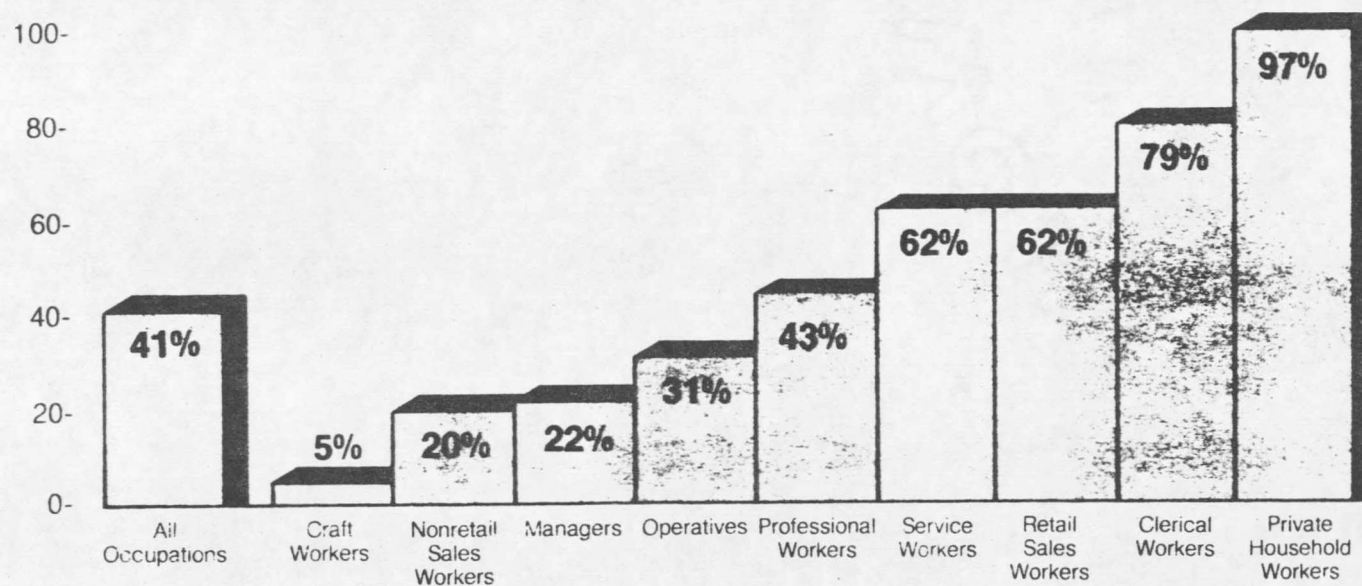


^{1/} Includes other professional staff

U.S. Department of Labor - Woman's Bureau, "Women's Workers Today", 1971.

Women Are Underrepresented as Managers and Skilled Craft Workers

Percent of Total Workers



Source: Prepared by the Women's Bureau, Office of the Secretary, from 1977 annual averages data published by the Bureau of Labor Statistics, U.S. Department of Labor.

August 1978

APPENDIX J

Disparity in Curriculums, Male/Female, 1970-71.

Field of Study	B.A. and first professional		M.A.		Ph.D.	
	Women	Men	Women	Men	Women	Men
Agriculture, natural resources	539	12,171	144	2,314	31	1,055
Architecture, environmental design	667	4,911	234	1,481	3	33
Biological sciences	10,571	25,462	1,943	3,812	595	3,050
Business management	10,805	105,906	1,045	25,609	23	787
Communications	3,813	6,989	642	1,214	19	126
Computer and information sciences	324	2,064	164	1,424	3	125
Education	132,236	45,402	50,020	39,047	1,355	5,043
Engineering	403	49,954	185	16,272	23	3,615
Fine and applied arts	18,169	12,278	3,165	3,513	138	483
Foreign languages	15,285	5,148	3,126	1,653	297	484
<u>Health professions</u>						
Nursing	12,029	245	1,511	31	1	6
Pharmacy	951	3,642	40	154	1	93
Dentistry (DDS or DMD)	46	3,731	--	--	--	--
Medicine (MD)	829	8,157	--	--	--	--
Home Economics	10,970	301	1,365	88	75	48
Law	1,320	16,877	46	909	--	20
Letters	44,782	26,616	7,328	5,415	567	1,849
Library sciences	932	81	5,713	1,315	11	28
Mathematics	9,494	15,424	1,524	3,677	93	1,106
Military sciences	1	356	--	3	--	--
<u>Physical Sciences</u>						
Chemistry	2,095	9,088	492	1,792	173	1,987
Physics	343	4,733	152	2,042	43	1,439
Psychology	17,037	21,117	1,651	2,787	427	1,355
Public affairs and services	4,566	4,737	4,099	4,307	43	135
<u>Social sciences</u>						
Economics	1,912	14,046	262	1,735	53	668
History	15,749	29,182	1,693	3,476	120	871
Pol: science, govt.	5,564	22,072	479	1,839	85	615
Sociology	19,959	13,703	677	1,132	119	455
Theology	1,135	7,664	661	2,049	6	306
Interdisciplinary studies	4,117	9,967	600	1,106	14	77
TOTAL	370,000	513,975	92,896	138,590	4,579	26,534

APPENDIX K

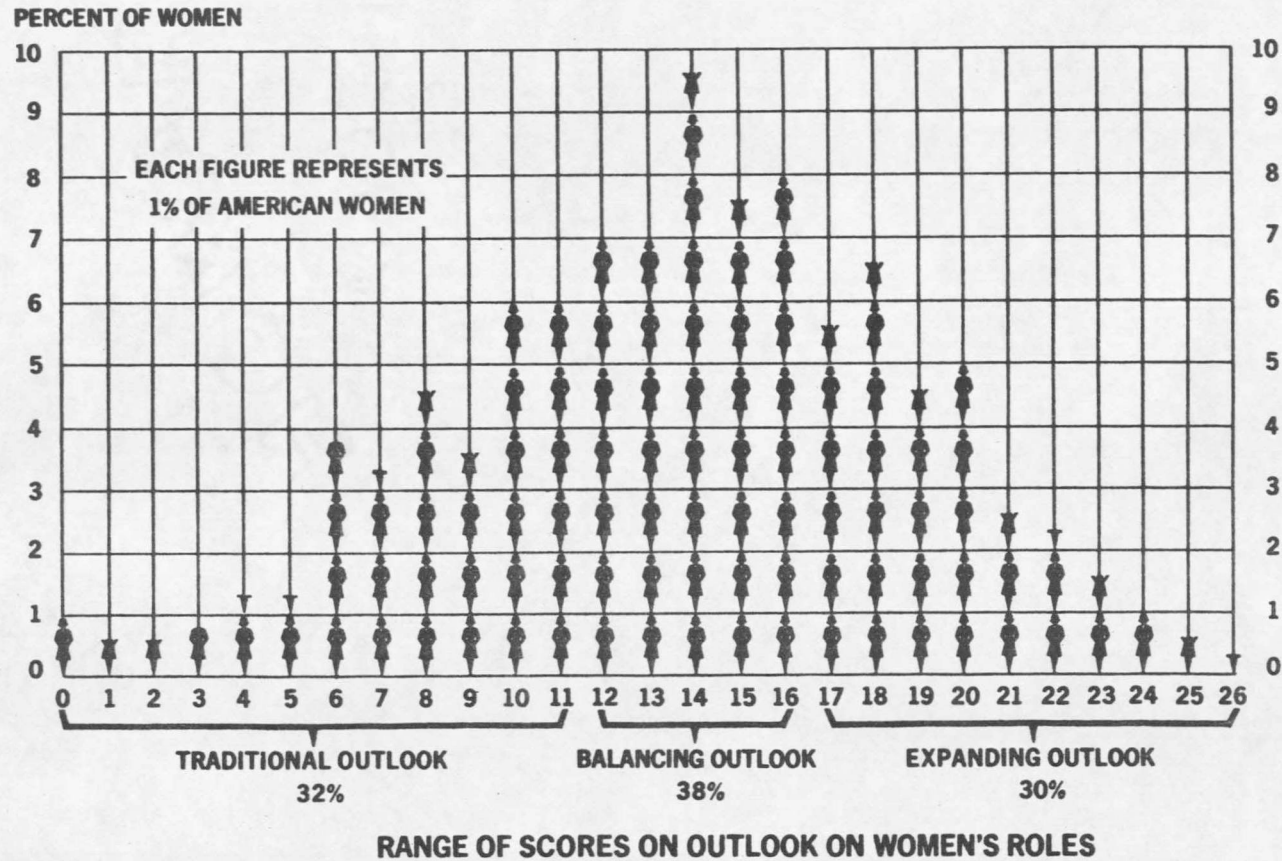
STARTING SALARIES OF COLLEGE GRADUATES ARE LOWER FOR WOMEN THAN MEN

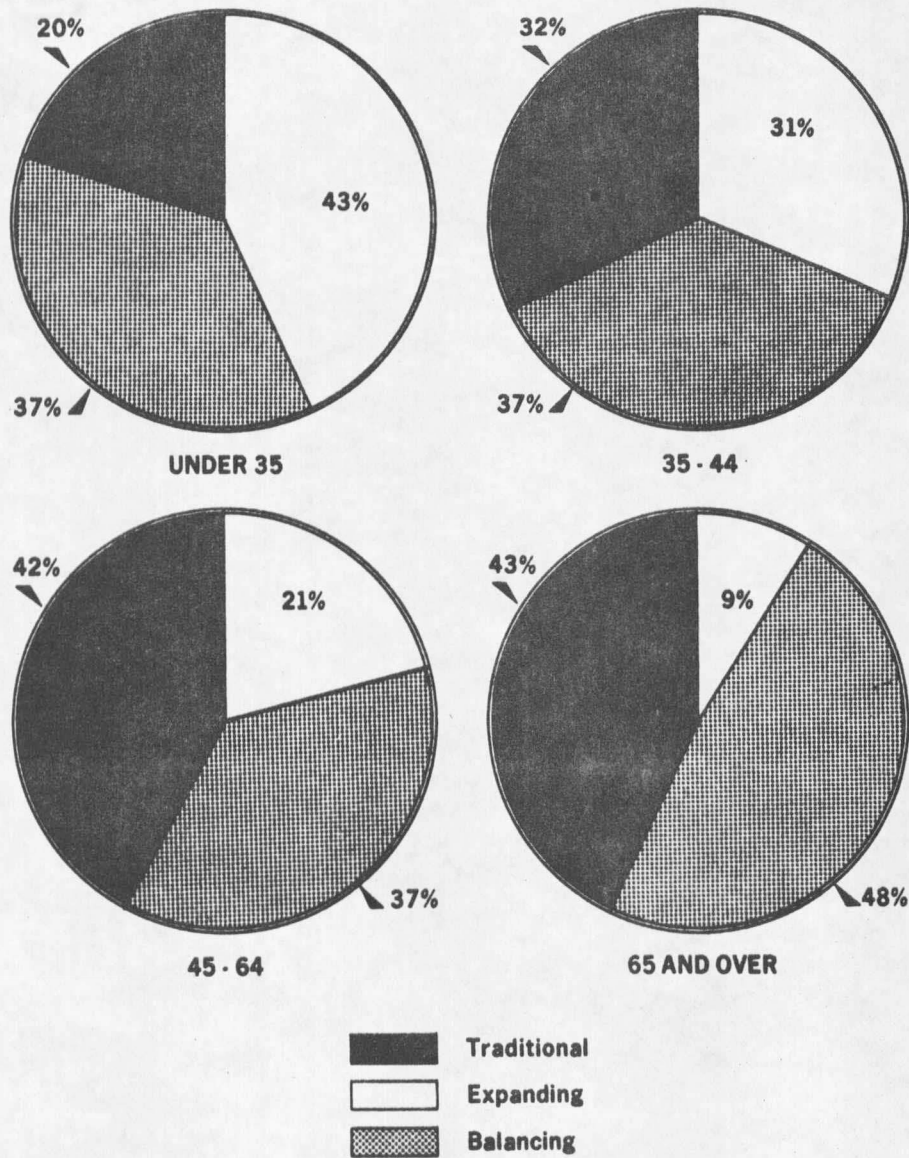
(Average Monthly Starting Salaries of Women and Men with Bachelors

Degrees, 1970)					
	\$500	\$600	\$700	\$800	\$900
Engineering	-----				\$872
	=====				844
Accounting	-----				832
	=====				746
Chemistry	-----				806
	=====				765
Mathematics-	-----				773
Statistics	=====				746
Economics-	-----				718
Finance	=====				700
Liberal Arts	-----				688
	=====				631
Men	-----				
Women	=====				

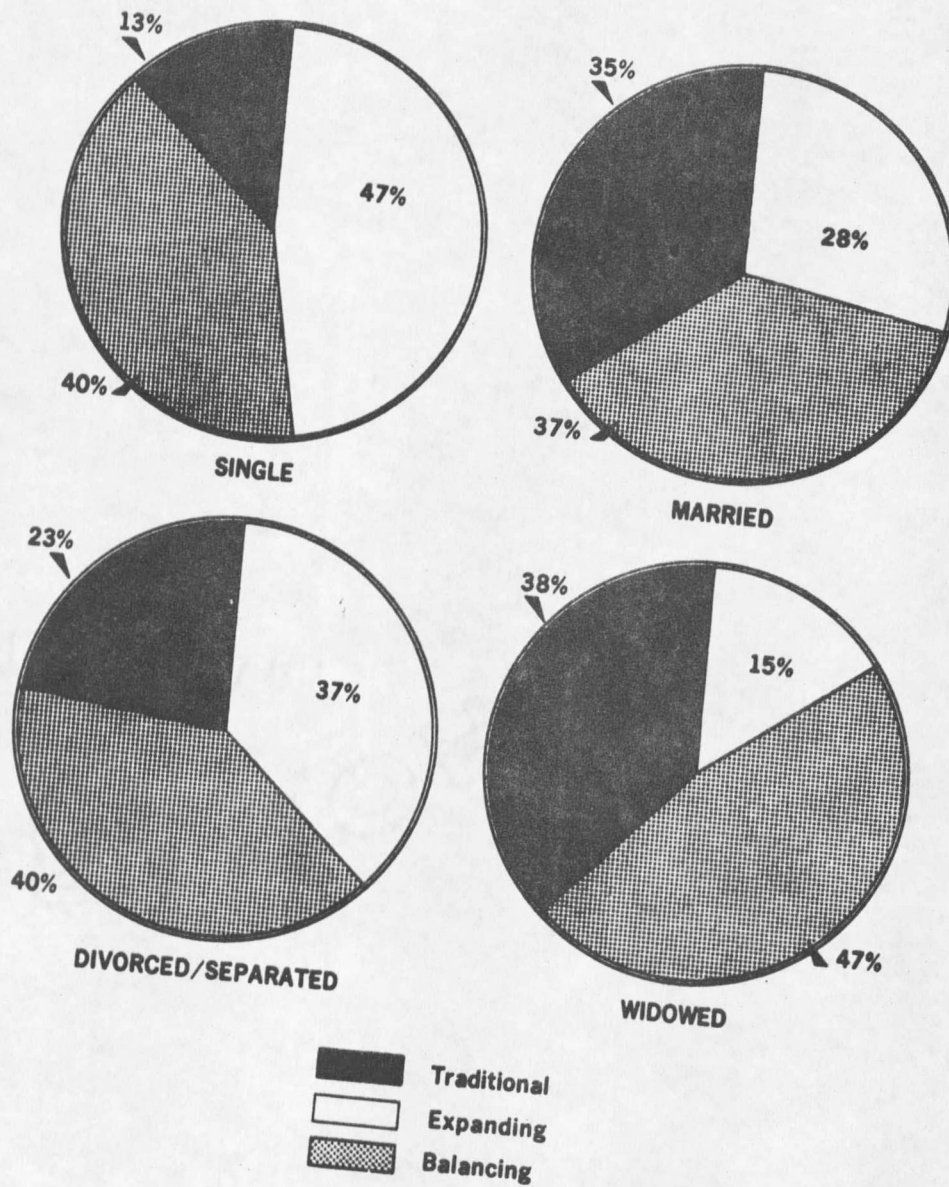
Source: U.S. Department of Labor - Women's Bureau, Women Workers Today, 1971.

MARKET OPINION RESEARCH

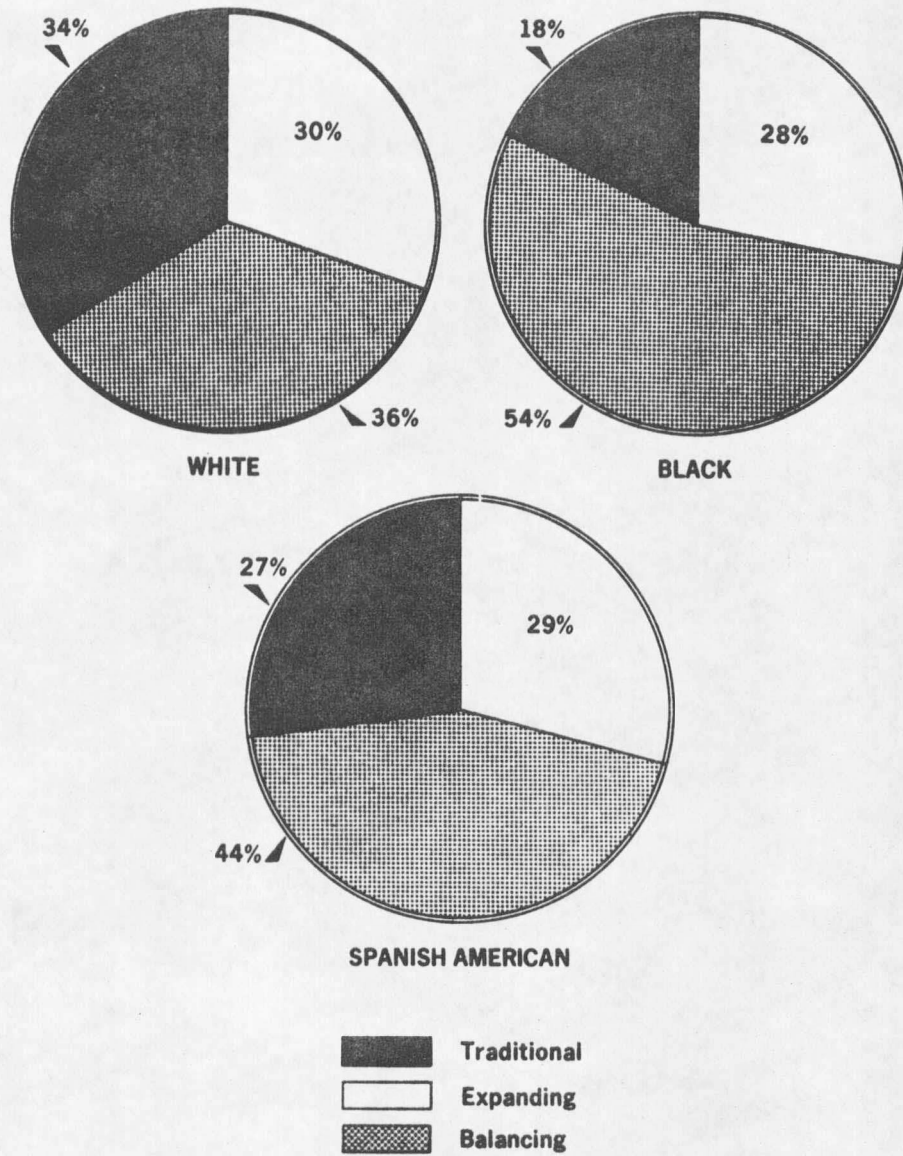




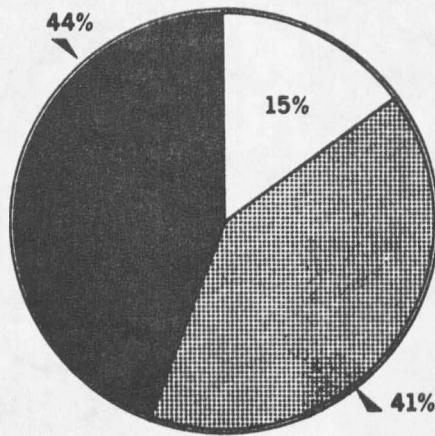
OUTLOOK ON WOMEN'S ROLES BY AGE



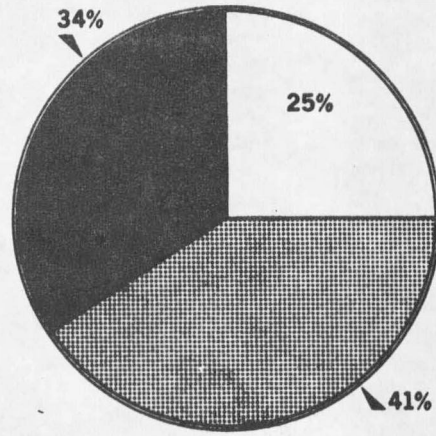
OUTLOOK ON WOMEN'S ROLES BY
MARITAL STATUS



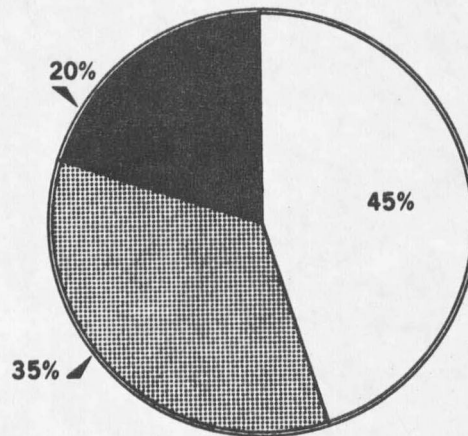
OUTLOOK ON WOMEN'S ROLES BY RACE



LESS THAN HIGH SCHOOL GRADUATE



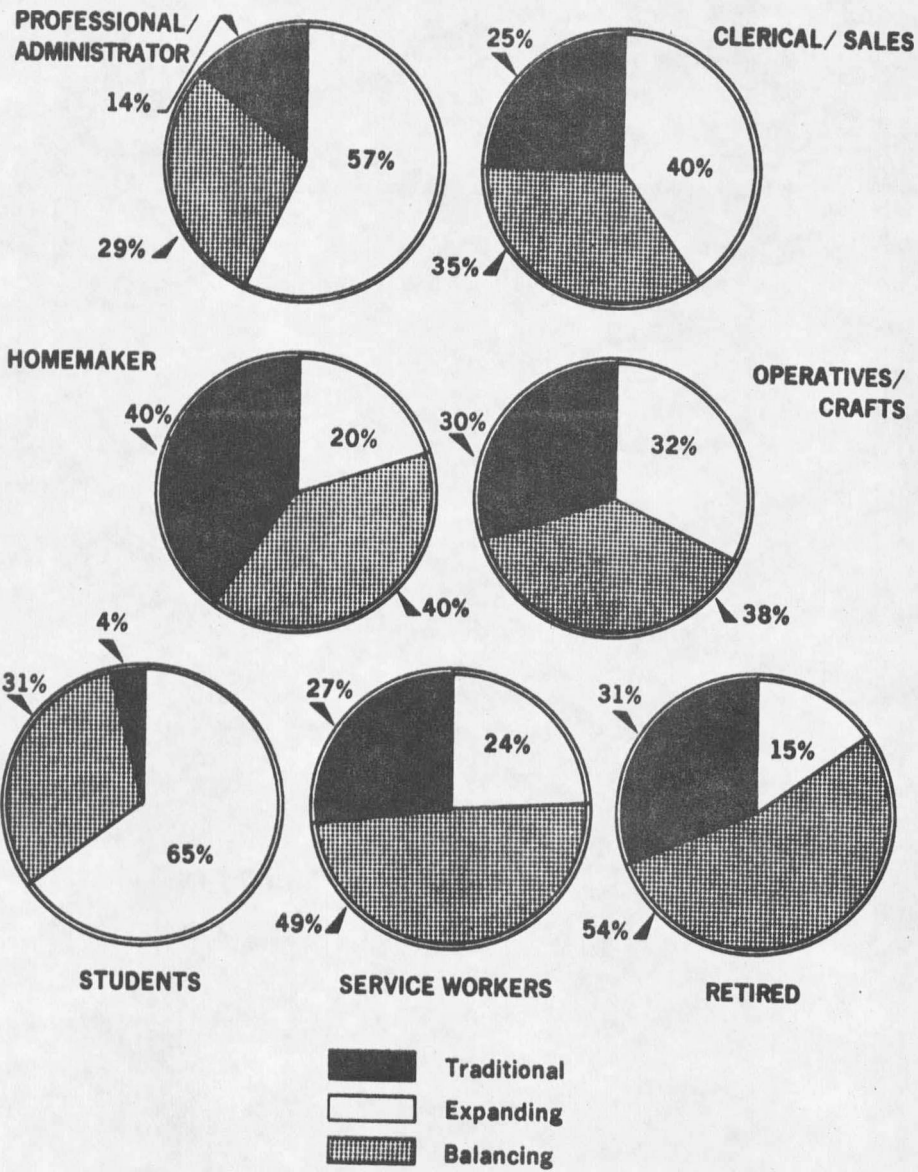
HIGH SCHOOL GRADUATE



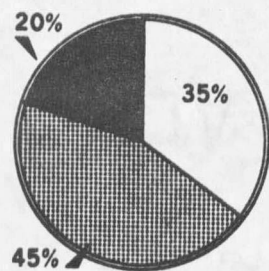
POST-HIGH SCHOOL EDUCATION



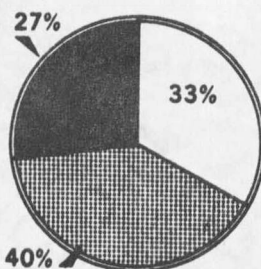
**OUTLOOK ON WOMEN'S ROLES BY
EDUCATION LEVEL**



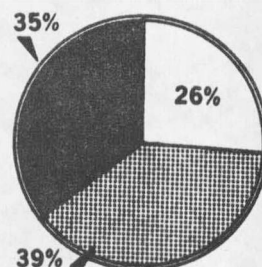
**OUTLOOK ON WOMEN'S ROLES
BY OCCUPATION**



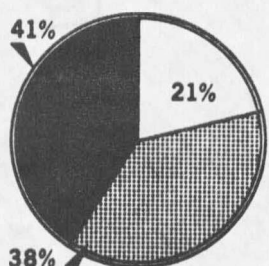
NEW ENGLAND



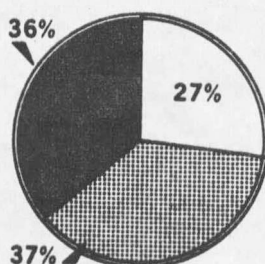
MIDDLE ATLANTIC



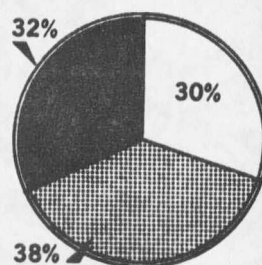
EAST NORTH CENTRAL



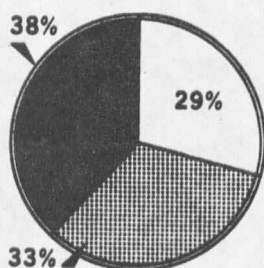
WEST NORTH CENTRAL



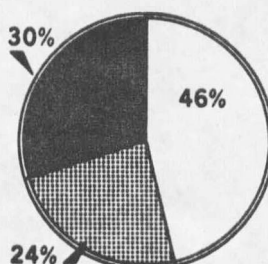
SOUTH ATLANTIC



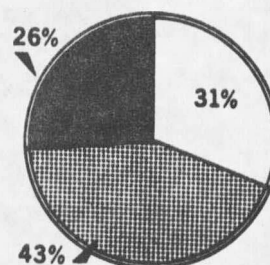
WEST SOUTH CENTRAL



EAST SOUTH CENTRAL



MOUNTAIN



PACIFIC



OUTLOOK ON WOMEN'S ROLES BY GEOGRAPHIC AREA

APPENDIX M

Yale University *New Haven, Connecticut 06520*

DEPARTMENT OF SOCIOLOGY
Box 1965 Yale Station

Rosabeth Moss Kanter

Rosabeth Moss Kanter is a professor of sociology at Yale University. She is also a partner in the organizational consulting firm, Social Analysis Associates. Formerly on the faculty of Brandeis University and Harvard University, she was a Fellow in Law and Sociology and a Visiting Scholar at Harvard Law School from 1975-1977.

Dr. Kanter received her B. A. from Bryn Mawr College in 1964, her M. A. in 1965, and the Ph. D. in sociology and social psychology from the University of Michigan in 1967. She is the recipient of many academic honors, including the prestigious Guggenheim Fellowship.

Her consulting clients have included some of the world's largest corporations, public organizations, universities, government agencies, alternative organizations, community groups, and the United Nations. She is a member of the Family Impact Seminar in Washington, D. C., preparing "family impact" statements for federal policy and legislation.

Her most recent book, Men and Women of the Corporation (Basic Books), is an alternate selection of the Book-of-the-Month Club and a selection of the Fortune Book Club. She is also the author of Work and Family in the United States (Russell Sage Foundation), Another Voice (Doubleday Anchor), and Commitment and Community (Harvard University Press), as well as nearly 40 articles in books and scholarly journals.

Dr. Kanter has pioneered in the study of the impact of organizational structure on group and individual behavior, including the implications of structure for commitment and motivation, for male-female interaction and the status of women, and for organizational effectiveness and the quality of work life.

SOCIAL ANALYSIS ASSOCIATES

6 CHANNING PLACE

CAMBRIDGE, MASS. 02138

(617) 868-5264

Barry A. Stein

Dr. Stein is a partner in the consulting firm of Social Analysis Associates and former Associate Director of the Center for Social and Evaluation Research at the University of Massachusetts at Boston. He has taught graduate courses in organization behavior, economic development, and management and business policy at Harvard, MIT, and the University of New Hampshire.

He has been a professional management consultant for over twenty years, first in technical fields, and, since 1962, specializing in organization development, management training, and, more recently, affirmative action. In 1976-77 he ran the core management seminar for the Women's Career Project of Northeastern University, a program designed in partnership with ten leading Boston companies. With Rosabeth Kanter he has developed organizationally-relevant programs on male-female communication at work.

His consulting career includes eleven years on the senior staff of Arthur D. Little, Inc. and several years as founder and President of Organization Development Associates, Inc. He has worked closely with dozens of firms, government agencies and non-profit organizations both in North America and Europe, recently including Union Carbide Corporation, Digital Equipment Corporation, Exxon USA, GTE Sylvania, the Ford Foundation, the Science Council of Canada, the U. S. Office of Economic Opportunity (now the Community Services Administration), the Young Presidents' Organization, and the Center for Community Economic Development. He has also served as Dean of several programs for the NTL Institute in Washington, D.C. and staff member of the male-female awareness programs for Northwestern Bell Telephone Company.

Dr. Stein also works on comprehensive approaches to organizational development and design and innovative programs of personnel management. He is active in exploring the uses of flexible work scheduling systems to enhance productivity and increase individual options. In May 1977, he was appointed to a U. S. Congressional Task Force on Appropriate Technology. He holds the B. S. and M. S. in chemical engineering from MIT and his social science Ph. D. in planning is also from MIT.

APPENDIX N
WORKSHOP I

Evaluation**Participants:**

In order that an evaluation may be made of this workshop, we are requesting your assistance. Please rate the aspects of this workshop on a scale of 1-5 with 1 being best possible and 5 being very negative. Please circle your response.

- | | | | | | |
|--|---|---|---|---|---|
| 1. The work of the consultants may be rated as - | 1 | 2 | 3 | 4 | 5 |
| 2. In terms of learning more about myself, I found this workshop to be - | 1 | 2 | 3 | 4 | 5 |
| 3. In terms of learning about sex roles and sex role stereotyping, I found this workshop to be - | 1 | 2 | 3 | 4 | 5 |
| 4. The accommodations for this workshop (rooms, food, recreation, etc.) were - | 1 | 2 | 3 | 4 | 5 |
| 5. My overall impression of the workshop was - | 1 | 2 | 3 | 4 | 5 |

Evaluation of Total Retreat

Please read all of the following statements. Then, circle the letter in front of those that state how you feel about the retreat as a whole.

- a. It was one of the most beneficial workshops/seminars that I have attended.
- b. Exactly what I wanted.
- c. I hope we have another one in the near future for other faculty and administrators.
- d. It provided the kind of experience that I can apply to my own situation.
- e. It helped me personally.
- f. I think it served its purpose.
- g. It had some merits.
- h. It was fair.
- i. It was neither very good nor very poor.
- j. I was mildly disappointed.
- k. It was not exactly what I wanted.
- l. It was too general.
- m. I am not taking any new ideas away.
- n. It didn't hold my interest.
- o. It was much too superficial.
- p. I left dissatisfied.
- q. It was very poorly handled.
- r. I didn't learn a thing.
- s. It was a complete waste of time.

In one sentence, please summarize your current thinking about the workshop -

In regard to the time spent in recreation and getting to know other folks, there was: ☐ too much ☐ too little ☐ about enough.

Would you like to participate in another workshop which started where this one left off? ☐ Yes ☐ No

What was the major strength of the retreat?

What was the major weakness of the retreat?

If, with the stroke of your pen, you could change anything about the retreat, what would it be?

Will you do anything differently in your own leadership position as a result of this retreat? If yes, what?

APPENDIX O

WORKSHOP I

EVALUATION SUMMARY

The first five questions in the workshop evaluation deal with various aspects of the workshop. A scale from one to five is used with one being the best possible answer and five being very negative. (?) means those who did not designate their sex on the questionnaire.)

1. Question: The work of the consultants may be rated as:

Responses of:	very positive			very negative	
	1	2	3	4	5
Males	3	8	1	1	0
Females	8	1	0	0	0
?	3	2	0	0	1
Total	14	11	1	1	1

2. Question: In terms of learning more about myself I found this workshop to be:

Responses of:	very positive			very negative	
	1	2	3	4	5
Males	1	7	5	0	0
Females	0	1	6	2	0
?	1	4	1	0	0
Total	2	12	12	2	0

3. Question: In terms of learning about sex roles and sex role stereotyping, I found this workshop to be:

Responses of:	very positive			very negative	
	1	2	3	4	5
Males	2	8	2	1	0
Females	0	7	1	1	0
?	3	2	0	1	0
Total	5	17	3	3	0

- 2 -

4. Question: The accomodations of this workshop (rooms, food, recreation, etc.) were:

Responses of:	very positive				very negative	
	1	2	3	4	5	
Males	4	6	2	1	0	
Females	3	5	1	0	0	
?	4	2	0	0	0	
Total	11	13	3	1	0	

5. Question: My overall impression of the workshop was:

Responses of:	very positive				very negative	
	1	2	3	4	5	
Males	2	9	1	1	0	
Females	4	5	0	0	0	
?	3	2	0	1	0	
Total	9	16	1	2	0	

EVALUATION OF TOTAL RETREAT This section of the workshop evaluation allows the participant to choose statements that reflect the way in which they feel about the retreat as a whole. The statements will be listed with the numbers of males, females & ?'s. (Those with no sex designation on the questionnaire)

- a. It was one of the most beneficial workshop/seminars that I have attended.
- b. Exactly what I wanted.
- c. I hope we have another one in the near future for other faculty and administrators.
- d. It provided the kind of experience that I can apply to my own situation
- e. It helped me personally.
- f. I think it served its purpose.
- g. It had some merits.
- h. It was fair.
- i. It was neither very good nor very bad.
- j. I was mildly disappointed.
- k. It was not exactly what I wanted.

Males	Females	?
2	3	3
1	1	0
7	8	1
7	6	4
9	7	5
6	7	5
4	1	2
4	2	1
0	0	0
1	0	0
0	0	0

- 3 -

	<u>Males</u>	<u>Females</u>	<u>?</u>
1. It was too general.	1	0	0
m. I am not taking any new ideas away.	0	0	0
n. It didn't hold my interest.	0	0	0
o. It was much too superficial.	2	0	0
p. I left dissatisfied.	0	0	0
q. It was very poorly handled.	0	0	0
r. I didn't learn a thing.	0	0	0
s. It was a complete waste of time.	0	0	0

The next section allows the participant to summarize in their own words their thinking about the workshop.

Males

1. It was interesting, stimulating and gave me some food for thought.
2. Lots of information about how people exist in organizations but more is needed on how to deal with sex roles which get in the way of professional working arrangements.
3. High beginning expectations, slight letdown as substance was delivered.
4. Reasonably good - not enough one to one.
5. I finished with more questions than answers to my old ones; tho this is good. (also - learn to spell sentence.)
6. Supurb - Scientific, Realistic, very much needed by staff & students alike. It has great potential benefits to MSU. Enrollment-wise, Budget-wise and in terms of life satisfaction for staff & students.
7. As much as goals were not stated, evaluation must be based on something else. If that something else is affect- I feel good about the workshop.
8. Many problems and ideas advanced but few expert solutions given by coordinators. Found out most from interaction with peers. Don't need expensive outsiders for this.
9. I believe it provided us with a better insight into some of my own beliefs on the issue at hand. Think should provide some guidelines for self improvement.
10. We need to exchange ideas with persons from the wide variety of staff presented here.
11. Many difficult questions were discussed-Affirmative Action policies are the issue and the mechanisms for implementation were not discussed.
12. I now can appreciate for the first time the problem of women and minorities when entering a new job or role.
13. A useful experience for most present, I believe.

- 4 -

Females

1. It was an excellent opportunity to open the door for a continuing dialog which needs to be pursued.
2. I think the men were (pleasantly) surprised to find that the women participants did not have pat answers and solutions; we were also surprised that the men were not more defensive.
3. It brought into the open many ideas & assumptions & allowed an opportunity for them to be discussed. Made inroads of awareness.
4. Fascinating, beneficial. Meeting and learning with people is always rewarding. The experience can't help but be good for MSU as a whole.
5. It was well done and I enjoyed the interactions with others.
6. Very well done, much useful information dispersed; good opportunity to get to know other faculty members, some opportunity for self evaluation.
7. I enjoyed the interactions with both men and women.
8. Surprised & pleased about the open minded approach to the issues - lack of defensiveness on part of males.
9. It was an exciting experience in having contact with the consultants and the interaction with other department heads.

?

1. Too many of the same kind of people patting each other on the back.
2. An important learning experience that should be shared with the entire faculty.
3. It heightened my awareness, raised my consciousness of the problem.
4. It seemed beneficial to me, conducted with taste and informative.
5. Excellent.
6. In general it was well done and worthwhile. It was a little too long for the amount of material covered. I felt a drag from 3:00 on.

- 5 -

The next section of the workshop evaluation allows the participant selection from 3 responses on the first question and 2 responses on the second question. Number of responses from males, females, & ?'s will be tabled.

1. Question: In regard to the time spent in recreation and getting to know other folks, there was:

	<u>about enough</u>	<u>too much</u>	<u>too little</u>
Responses:	<u>Males</u>	<u>Females</u>	<u>?</u>
Too much -	0	1	0
Too little -	0	0	3
About enough -	13	8	3

2. Question: Would you like to participate in another workshop which started where this one left off? yes no

Responses:	<u>Males</u>	<u>Females</u>	<u>?</u>
Yes -	12	9	2
No -	1	0	2

The next section of the workshop evaluation again allows the participants to answer questions in their own words.

1. Question: What was the major strength of the retreat?

Males

1. The opportunity for open frank discussion.
2. Learning that women have much the same aspirations, feelings and attitudes that men have.
3. Facilitated exchange of ideas.
4. Encouraged awareness.
5. Getting to know the feelings of both the men and women participants.
6. Quality of staff & high intellectual participation.
7. Method of interaction.
8. Interaction with others at MSU.
9. The ideas brought forth by the consultants.
10. The variety of personal ideas.
11. Rosabeth's talk Thursday P.M.

- 6 -

12. Exchange of ideas.
13. Opportunity to get to know others present in terms of sex stereotyping.

Females:

1. The stimulation of the consultants - variety of ways of initiating discussion.
2. Emphasis on dialogue.
3. Having opportunity to talk about subjects that are generally not openly discussed, i.e. sexual feelings.
4. Interaction.
5. It was away from Bozeman which allowed people to be more free possibly. The consultants were excellent & employed successful techniques to get people to interact.
6. Opportunity to exchange ideas with other faculty with a workable framework of cognitive information.
7. It isolated us from immediate work pressures and allowed us some time for leisurely conversation.
8. Openness and willingness to participate of everyone who attended.
9. The openness and willingness to share on the part of male participants.

?

1. Rosabeths discussion on power.
2. Trust.
3. Openness, frankness of the participants.
4. Acquaintances.
5. Small group discussions and getting to know colleagues in a relaxed atmosphere.
6. The interaction of staff.

2. Question: What was the major weakness of the retreat?Males:

1. Timing, a class day in first week of quarter.
2. Not long enough.
3. Substantial resources of the two leaders not tapped.

- 7 -

4. Too many hours on Friday.
5. Not geared toward the major goal of the university i.e. working with students.
6. Extension, Agriculture & Engineering too sparingly represented.
7. Somewhat diffuse in purpose.
8. Sociological approach which leaves out plausible solutions.
9. Not enough of ideas brought forth by consultants.
10. Women & men were too uniform in opinions.
11. A bit too long.

Females:

1. Disappointment that we can't come away with all tools we need to effect change.
2. Too long a "sitting time" the last afternoon, a break & swim, then returning for an evening session would have stimulated the group.
3. The representation was good but a few dynamites were left at home - wish they were here.
4. Too short.
5. Too little time.
6. No major weakness.
7. Too much time spent generating & writing down lists.
8. Too short.

?

1. Too many like minded people.
2. Fatigue during the afternoon session.
3. Too hectic.
4. Too long for material covered.

3. Question: If, with the stroke of your pen, you could change anything about the retreat, what would it be?

Males:

1. Timing.
2. Nothing.

3. More direct info, comparative by leaders.
4. Can't think of anything now.
5. Longer with definite plans for 2 or 3 year followup.
6. Nothing.
7. Move it to campus and get local people involved. Make attendance mandatory and during working hours.
8. Not enough ideas brought forth by the consultants.
9. A more diverse group.
10. Stop at 4 o'clock.
11. A little more time for informed discussion a evening session would have been enjoyable and beneficial.

Females:

1. Mandatory co-ed swimming.
2. I would be more knowledgeable about these issues before the workshop started.
3. Last longer.
4. Extend it to two full days.
5. I thought it was well done and would not like to change anything major.
6. More input from consultants. More large group discussion as people get to know one another better.
7. The attitude of those who work at Fairmont.

?

1. Have more opportunity to meet different people.
2. One half day longer to spread out process and provide a bit more informal interaction.
3. Eliminate my hangover.
4. More leisure.

4. Question: Will you do anything differently in your own leadership position as a result of this retreat? If yes, what?

Males:

1. At least give more thought to the problems discussed which I was predominately insensitive to previously.

- 9 -

2. Yes - Listen better.
3. Be more systematically conscious of stereotyping on my part, induce others to replicate experiment.
4. Probably no but . . .
5. I'll use much of the material in my classroom activities.
6. My attitude on many issues has changed or are under analysis. I have no leadership position except with student, which is fine.
7. Nothing concrete.
8. Yes - in counseling women students I will be more understanding of their conflicts.
9. Listen better.

Females:

1. I will initiate discussion with faculty and students on the issues that were raised here. I will think again about administrators and others I have to approach this quarter in relation to program planning.
2. Try to be more sensitive to reasons for resistance in individuals to separate their role from their individuality.
3. Be more aware of male colleagues "hang-ups" & try to respond to these in a more positive manner. Make more "statements" & not phrase them in form of questions.
4. Yes - be more aware, be more encouraging to advancement of my staff. (educationally etc.)
5. No, I'm already using many techniques to try to eliminate stereotyping thinking by all people.
6. Make certain that members of my department hear about it, incorporate some of this information in my class.
7. I need to reflect, but I can't see any changes yet.
8. Not sure.
9. Be more empathetic with males.

?

1. No
2. Yes, think about role model to exemplify for my students and colleagues.

- 10 -

3. Probably not.
4. Perhaps more sensitive; more understanding. I don't think my basic attitudes were changed or that they needed changing.
5. Be more sensitive.
6. I'm sure this experience will affect how I advise students and work with staff in the future.

APPENDIX P

Workshop I Discussion

The first of these workshops consisted of eleven (11) hours of training and utilized outside consultants, Dr. Rosabeth Moss Kantor and her associate Dr. Barry Stein.

1. "Organizational Renewal"

An opening lecturette by Dr. Rosabeth Moss Kantor addressed the subject of opportunity power and relative numbers. Dr. Kantor discussed the organizational framework, "Organizational Renewal", which according to Dr. Kantor "seeks to increase people's competence, effectiveness and motivation, thereby expanding individual options." This systematic approach has been applied to business and industry which has confirmed the theory and demonstrated its significance.

The framework involves three key elements: opportunity, power, and relative numbers. Opportunity, in this case, is defined not merely as promotion but any mechanism providing growth, development, challenge, contribution to the organization, enhanced competence, recognition and influence.

Power means efficiency and access to resources, rather than authority or the power or organizational position. Power is simply the ability to get things done -- to mobilize resources. People with little power tend to protect their territory and often become petty,

domineering and rules-minded. The universal symbol of ineffectiveness is the petty bureaucrat who, in truth, is a powerless person. Dr. Kantor pointed out that the powerless person can become more effective -- hence more powerful -- by gaining visibility and by doing the unusual. People with power are willing to share, support others and are more broadly involved. Powerful people are truly effective people.

Relative numbers apply to any situation where a societal group dominates substantially over another group, e.g., whites and blacks, men and women, etc. Dr. Kantor distinguished between these two groups by calling them "X's" and "O's". The people who are in the majority are more visible and on display, thus they feel more pressure to perform and conform. Those persons in majority become more aware of their similarities with each other and the dissimilarity with those in the minority group, making them more prone to stereotype the behavior of those in the minority. Dr. Kantor states, "The challenge for contemporary organizations involves simultaneously opening opportunities for the disadvantaged and also reducing the basis of mobility for the advantaged, substituting other rewards and values, and making them 'real' through organizational design."

The distinctive feature of this framework is that it moves beyond merely individual strategies that seek to progress by changing, training, or selecting people. Instead, it indicates how the very structure

of the organization can increase or decrease people's competence, effectiveness and motivation, thereby expanding almost everyone's options.

Following Dr. Kantor's lecturette on "Power", this first session ended, allowing some time for participants to relax and enjoy the recreational facilities of the resort before retiring.

The Workshop resumed the following day with a discussion of feelings, thoughts and concerns of participants that had been generated by the first session. It was found that Dr. Kantor's lecturette on "Power" had led to considerable informal discussion the night before which lasted for a number of hours. The focus of the exchange dealt with "X's" and "O's", and with who was crazy -- those who are "movers" in the organization or those who are "stuck." Several individuals, both males and females, indicated that indeed they felt they were "minorities" in the University organization.

2. Future Projections

The second major subject of the workshop involved examining the future of male and female students ten to twenty years from now. The participants in small groups "brainstormed" future projections, resulting in the composite list that follows. Included in this list are some of the consultants' projections of the future.

Composite of Future Projections

Finite resources/population increase

Change from intellect to experience values

Teaching different rewards, less consumption related

Rewards not automatically equal

No automatic differences between sexes

Jobs and careers on continuum -- depends on individual

Less status difference between occupations

More conflict -- scarce resources

Alternative modes for conflict resolution

Conflict especially among movers

Encourage more creativity, outside administration structure

More demand for power

Need for more adaptable people

Shorter careers; enter late and leave early

More leisure time

More service jobs, less production

More transactions/interactions

More power or more conflict

No automatic advantages to men/women

Wives breadwinners as much as husbands

Wives' careers equally important/independent

More women in key social roles; men more dependent on powerful women

Men less able to depend on women/wives for "home" needs

Women equally assertive in relationships

Men to be confronted, disagreed, put down and denied by men

Rewards for more open/direct interaction

More women in sports, casual and professional

Many more businesses owned/operated by women

More public interest in women's sports, TV contests, rewards

Women will need training (will be managers) in engineering, business, finance, etc.

Less likely to have children

Men -- fewer ulcers, hypertension, etc.

Women -- more ulcers, hypertension, etc.

More routine collaboration between men and women, business/share work

More family businesses/share work

Men will work for 20 years+ in careers

Perhaps less automation

Continued gap between men and women wages

Increased passive and active forms of leisure

Training in leisure

Increased crisis of American life styles

Decline of Western values; literacy, family

Increase towards anarchy/conflict

Survival crisis

Trained appreciation for quality of life

Consideration of "options for perfect society"

Need for more trained communication and respect

More tension management

Increased unemployment

More lock-step advancement

No "discrimination" positions

Seniority principles

Male faculty more comfortable advising female students behind closed doors

More sex-balanced groups, etc.

More freedom, more education, more grass roots

More hard-nosed women, leaders

More universal day/child care facilities

More women handling money, repairing cars, doing technical tasks, etc.

More formal benefits for housework

Careers in paid "home care"

Men will live longer; women less long

More routine participation of men in arts, music, dances, etc.

Good chance President will be a woman

Much more work flexibility

Few men's/women's clubs

More routine time off from work for education, career shifts,
renewal

More books, movies, TV with women heroes

More routine competition for jobs

No more "marriage tax"

More men will be "wives"

3. Modes of Communication

As a prelude to a lecturette by Dr. Kantor and subsequent group interaction, participants were asked to gather in male/female groups and compile questions they would like asked of the other sex. The following items were obtained from these groups.

Composite of Women's Questions for Men

1. Are any men in this group contemplating changing their roles?
If so, with what effect on themselves and families?
2. In what ways do men feel they are stereotyped?
3. What is feminine?
4. What is masculine?
5. Do you see these as positive or negative?
6. Which ones of these would you like for yourself?
7. How has your image around women been formed (i.e., books, own mother, advertising)?

8. How would you feel about having a female Department Head? Dean? Vice-President of Academic Affairs?
9. How did you get your position? (network, etc.)
10. How do you feel about a male secretary?
11. How do you feel about a female protege'?
12. Can men and women work together without sex being an issue?
13. Do you feel like you must play male-female games before we can work effectively together?
14. Can we show affection without it being interpreted as a sexual come-on?
15. How do you view those of us here now?
16. What kinds of behaviors do you find threatening?
17. When are you uncomfortable within your male groups?
18. What sexist behaviors have you seen exhibited in this group?
19. Do you value women's opinions and how do you show you do?
20. What goes on behind the blank stares?
21. When women enter men's traditional realms, is the resistance fear or incompetence or fear of competence?
22. What behaviors have you observed in yourself and others that make women feel excluded in a group?
23. How would you react if your wife wanted to take a job to further her concern and it was away from home? What reactions? Fears?
24. What behaviors and behavioral differences do you observe in yourself and others working with female vs. male students?
25. Would you hire a female professional if she were as good as male candidates or would she have to be better?

Composite of Men's Questions for Women

1. Do women really believe that men's lot is better in jobs, society, etc.?
2. Do women feel they are more sensitive than men and do they need to adjust this sensitivity if the woman is in a leadership position?
3. Who is to blame for the current inequalities in status?
4. Why do more men than women favor ERA?
5. Do the women who are here feel job discrimination personally and could they describe the feelings?
6. Are women conscious of sexuality when they are working on a one-to-one basis?
7. Do women ever consider that taking over men's roles may be a mistake (as opposed to creating new roles)?
8. How are women coping with the added anxiety of more responsibility and opportunity?
9. Is greater role independence producing greater sexual aggressions or greater sexual self-sufficiency?
10. Do women feel it would be good to reproduce by cloning and eliminate sexual activity?
11. Assuming a conflict between a shorter career and professional advancement, how would you believe your professional potential?
12. How do women interpret the phenomenon of women's fascination with soap operas?
13. How do women interpret the phenomenon of men watching sports on TV?
14. Who are your role models on the media?

15. Does group morale improve when women are incorporated into decision making processes?
16. Is my money ours and your money yours?
17. If you were my wife, would you wonder what I was doing at "FHS"?
18. How do you feel about justice of "Q" system?
19. Are there any jobs which are interently masculine or feminine?
Example?
20. To what extent should informal meeting sites (e.g., locker rooms) be integrated?
21. Who would you rather work for -- a "sexist" or a "liberated" person?
22. Should women be involved in military combat roles?

Rosabeth Moss Kantor followed this activity with a presentation on differences in male and female modes of communication. The following were cited as interaction and communication patterns as a part of our society's male and female stereotypes:

Mode of Communication

<u>Men</u>	<u>Women</u>
Talk	Listen
Make statements	Ask questions
Have the answers	Seek the answers
Initiate	Respond
Solve problems ("dragon slaying")	Present problems

Control feelings

Expect to be "understood", to
have wishes known and
met

Express feelings

Observe, be understanding,
anticipate wishes, needs.

As a follow-up to this lecture, the participants were again asked to form small groups with a mixture of male and female participants each attempting to ask the questions that were earlier formulated, using the "Mode of Communication" common to the other sex.

4. Role Play Exercise

Following some discussion led by the consultants concerning a role play activity was formulated and acted out. The purpose of this exercise was to help facilitate the incorporation of "new learning" back into the institution.

APPENDIX Q
WORKSHOP II

1. EVALUATION

Participants:

____ Male ____ Female

In order that an evaluation may be made of this workshop, we are requesting your assistance. Please rate the aspects of this workshop on a scale of 1-5 with 1 being best possible and 5 being very negative. Please circle your response.

	Very <u>Positive</u>					Very <u>Negative</u>				
1. The work of the consultants may be rated as	1	2	3	4	5					
2. In terms of learning more about myself, I found this workshop to be	1	2	3	4	5					
3. In terms of learning about sex roles and sex role stereotyping, I found this workshop to be	1	2	3	4	5					
4. The accommodations for this workshop (food, etc.) were	1	2	3	4	5					
5. My overall impression of the workshop was	1	2	3	4	5					

2. EVALUATION OF TOTAL RETREAT

Please read all of the following statements. Then, circle the letter in front of those that state how you feel about the workshop as a whole.

- a. It was one of the most beneficial workshops/seminars that I have attended.
- b. Exactly what I wanted.
- c. I hope we have another one in the near future for other faculty and administrators.
- d. It provided the kind of experience that I can apply to my own situation.
- e. It helped me personally.
- f. I think it served its purpose.
- g. It had some merits.
- h. It was fair.
- i. It was neither very good nor very poor.
- j. I was mildly disappointed.
- k. It was not exactly what I wanted.
- l. It was too general.
- m. I am not taking any new ideas away.
- n. It didn't hold my interest.
- o. It was much too superficial.
- p. I left dissatisfied.
- q. It was very poorly handled.
- r. I didn't learn a thing.
- s. It was a complete waste of time.

3. What was the major strength of the workshop?

4. What was the major weakness of the workshop? _____

5. If, with the stroke of your pen, you could change anything about the workshop, what would it be? _____

6. Will you do anything differently in your own leadership position as result of this workshop? If yes, what? _____

7. Why did you sign up for this project? Please be specific. _____

8. Will your skills, attitudes and behavior change as you work with students in the advising process as a result of these workshops? Yes ____ No ____
If yes, please specify in what ways. _____

9. Could you have benefited more from this workshop material if it had occurred at a different point in your career? Yes ____ No ____ If yes, please be specific. _____

10. Have your attitudes and/or behaviors changed as you deal with colleagues, male and female, as a result of these workshops? Yes ____ No ____ If yes, please specify in what ways. _____

11. Are there any future training needs you personally anticipate regarding reduction of sexual stereotyping? Please specify. _____

12. Are you still in contact with other workshop participants?
Rarely 1 2 3 4 5 Frequently

13. Do you initiate this contact or does it occur by chance? Specify. _____
-
14. How often does such contact provide:
- | | <u>Seldom</u> | | <u>Frequently</u> |
|--|---------------|-------|-------------------|
| a. Support | 1 | 2 3 4 | 5 |
| b. Information on jobs | 1 | 2 3 4 | 5 |
| c. Professional information/assistance | 1 | 2 3 4 | 5 |
| d. Searches for female job applicants | 1 | 2 3 4 | 5 |
| e. Searches for male job applicants | 1 | 2 3 4 | 5 |
15. How important is this contact to you?
- a. Nice, but not critical _____
- b. Useful _____
- c. Absolutely essential _____
16. Estimate how many other women administrators/faculty there are on your campus at your level and higher. _____ What are their positions(if known)? _____
-
17. Were they promoted internally or recruited from outside (please give routes to job if known)? _____
-
18. How adequate do you find this institution's efforts to enhance opportunity for women in administration?
- Poor 1 2 3 4 5 Excellent
19. How adequate do you find this institution's effort to enhance opportunity for men in administration?
- Poor 1 2 3 4 5 Excellent
20. How often does your job bring you into contact with (circle number that applies)
- | | <u>Rarely</u> | | <u>Frequently</u> |
|------------------------|---------------|-------|-------------------|
| a. Students | 1 | 2 3 4 | 5 |
| b. Male faculty | 1 | 2 3 4 | 5 |
| c. Female faculty | 1 | 2 3 4 | 5 |
| d. Male administrators | 1 | 2 3 4 | 5 |

	<u>Rarely</u>					<u>Frequently</u>				
e. Female administrators	1	2	3	4	5					
f. Other administrators through attendance at conferences, meetings, etc.	1	2	3	4	5					

21. Do you feel that there have been any barriers to your career progress?

_____ None

_____ Some, but easy to overcome, Please specify. _____

_____ A great many, difficult to overcome, Please specify. _____

Thank you for your time and cooperation!

APPENDIX R

WORKSHOP II EVALUATION SUMMARY

The first five sections of question #1 deal with various aspects of this workshop. A scale from one to five is used with one being the best possible answer and five being very negative.

I. EVALUATION

1. Question: The work of the consultant may be rated as:

Responses of:	Very Positive				Very Negative
	1	2	3	4	5
Males	4	6	2	1	0
Females	2	5	1	0	0
TOTAL	6	11	3	1	0

2. Question: In terms of learning more about myself, I found this workshop to be:

Responses of:	Very Positive				Very Negative
	1	2	3	4	5
Males	1	5	6	0	1
Females	0	4	3	1	0
TOTAL	1	9	9	1	1

3. Question: In terms of learning about sex role stereotyping, I found this workshop to be:

Responses of:	Very Positive				Very Negative
	1	2	3	4	5
Males	3	5	4	0	1
Females	1	1	5	0	0
TOTAL	4	7	9	0	1

4. Question: The accommodations for this workshop (food, etc.) were:

Responses of:	Very Positive				Very Negative
	1	2	3	4	5
Males	5	1	5	1	1
Females	0	5	2	0	1
TOTAL	5	6	7	1	2

5. Question: My overall impression of the workshop was:

Responses of	Very Positive				Very Negative
	1	2	3	4	5
Males	1	7	4	0	1
Females	1	5	2	0	0
TOTAL	2	12	6	0	1

The section that follows is an evaluation of the total retreat. It allows the participant to choose statements that reflect the way in which they feel about the retreat as a whole.

2. EVALUATION OF TOTAL RETREAT

	<u>Males</u>	<u>Females</u>
a. It was one of the most beneficial workshop/seminars that I have attended	1	1
b. Exactly what I wanted.	0	0
c. I hope we have another one in the near future for other faculty and administrators.	5	5
d. It provided the kind of experience that I can apply to my own situation.	6	3
e. It helped me personally.	4	4
f. I think it served its purpose.	7	6
g. It had some merits.	4	1
h. It was fair.	4	1

	<u>Males</u>	<u>Females</u>
i. It was neither very good nor very poor.	2	1
j. It was mildly disappointing.	0	1
k. It was not exactly what I wanted.	1	0
l. It was too general.	1	0
m. I am not taking any new ideas away.	1	0
n. It didn't hold my interest.	0	0
o. It was much too superficial.	0	0
p. I left dissatisfied.	1	1
q. It was very poorly handled.	0	0
r. I didn't learn a thing.	1	0
s. It was a complete waste of time.	1	0

The next section allows participants to summarize in their own words their impressions of the workshop.

3. WHAT WAS THE MAJOR STRENGTH OF THE WORKSHOP?

MALES

1. Freedom and structured participation by participants.
2. Frank discussion in groups involving persons of both sexes.
3. It forced me to examine my own opinions in light of the opinions of others.
4. Personal acquaintances.
5. Discussion with other participants.
6. Honesty of participants.
7. Individual interaction and expression of opinion.
8. Last item on what can be done to implement greater awareness at MSU.
9. Interaction with other faculty.
10. Exchanging ideas with others.
11. Considering the job-bias problems of women.

12. Discussion among peers that brought out differences in thinking on topics considered.

FEMALES

1. Got men and women talking about things we could never have talked about with each other normally.
 2. The exercises to create self-evaluation and discussion.
 3. Good interaction between participants facilitated by consultants.
 4. Dialogue between faculty.
 5. Interaction with colleagues.
 6. Facilitating interpersonal communication.
 7. Interaction with men faculty.
 8. Openness of participants.
4. WHAT WAS THE MAJOR WEAKNESS OF THE WORKSHOP?

MALES

1. Timing - the week before finals, not a broad enough representation. i.e. heavily administration oriented.
2. Too narrowly conceived cases and work group assignments. Not enough time and planning about next steps.
3. No major weaknesses.
4. Too few people.
5. Issues were "old hat".
6. Somewhat superficial.
7. None.
8. A few individuals did not actively participate.
9. Too repetitious.
10. Rather superficial,
11. No housewives or working women off the street - too many university professors trained for tolerance and understanding.
12. No new material.
13. Not typical cross-section of people. Discussion too general.

FEMALES

1. Not enough men participating in this second session.
 2. The male participant's attitudes toward sex roles and stereotyping female behaviors.
 3. People were a little tired after working all day.
 4. Some repetition in the exercises - could have used more variation.
 5. Too similar topic - wise to first retreat.
 6. Covered some of the same ground we had discussed in January.
5. IF, WITH A STROKE OF YOUR PEN YOU COULD CHANGE ANYTHING ABOUT THE WORKSHOP, WHAT WOULD IT BE?

MALES

1. Hold it another time.
2. Tell me how to eliminate persons being O's aside from density.
3. Study laws and regulations that are biased and how to change them.
4. More specific data and statistics.
5. More time might have been helpful to develop the last topic toward an action program.
6. Better facilities with sound proof walls.
7. Longer - all day in order to generate intensive group rapport.
8. Ask the participants what they thought were the real questions.
9. Too few people.
10. Have one panel discussion with administrators, faculty and students as panelists as one part (@ 1 hour) of the program.
11. Better concept of the group change process.
12. Inclusion of junior staff and/or other professional persons - both sexes.
13. Not typical cross section of people. Discussion too general.

FEMALES

1. Have more of the original Fairmont participants in attendance.
2. Add some more people who need it.

3. Earlier in quarter. Higher attendance would have indirectly expressed interest and concern for situation - lack of attendance did the same, therefore . . .
 4. An information session with the first consultants.
 5. Environment.
 6. Make all department heads attend!
6. WILL YOU DO ANYTHING DIFFERENTLY IN YOUR OWN LEADERSHIP POSITION AS A RESULT OF THIS WORKSHOP? IF YES, WHAT?

MALES

1. Not really in a leadership position.
2. Better concept of the group change process.
3. Not much, mainly because I am not in a leadership position.
4. Not much tangible.
5. More sensitivity to role stereotyping in my counseling of students.
6. Yes, encourage more females into leadership positions.
7. I feel that this exposure will affect the way I handle class and staff situations.
8. Not certain.
9. I'll try to be attentive to see if I'm treating all people as equal.
10. Give my secretary more authority and recognition.
11. Yes - advocate stronger for women in my field.

FEMALES

1. Probably be more assertive in our impressing on others need to change behavior.
2. Yes, be aware - continue to strive for equal opportunities for students.
3. Maintaining open communication is a common problem - try to give feedback on workshop and occasionally discuss attitudes.
4. Increase my commitment to advising students in a non-biased manner.
5. Try to be more effective in communicating needs of women.
6. Try to talk with more faculty about their concepts and awareness - to find if they see any sex discrimination at all.

7. Yes, double my effort to enlist the help of others in encouraging students in nontraditional roles and foster awareness.

7. WHY DID YOU SIGN UP FOR THIS PROJECT? PLEASE BE SPECIFIC.

MALES

1. Hear the job-bias problems; See if I were to be "brainwashed".
2. I wanted to understand problems bothering the administration of its programs.
3. Attempt to find out more about subject.
4. I was invited to participate. (I'm glad I did.)
5. Curious - wanted to know if I was sexually biased.
6. I wanted to update my thinking on women's perception of problem.
7. Thought it might be interesting to see how others thought about question of sex bias.
8. President's encouragement and trying to be broad-minded.
9. Desire to evaluate my own attitudes and seeing what the attitudes of others are.
10. Realized there were problems on campus and hoped to get new ideas.
11. Curiosity - Urging of Department Heads.
12. Curious about project.

FEMALES

1. I was delighted to be invited as one of the select.
2. I felt that I could help communicate some ideas about the changing role of women.
3. I realized the great need for discussion of this subject and identification of strategies for change.
4. Because I am interested in the subtle problems of discrimination and how other people see them.
5. Directly relates to my position and my concern and dedication to the development of opportunities for all students.
6. I'm interested in females being accepted as equals to men.
7. Interest.

8. WILL YOUR SKILLS, ATTITUDES AND BEHAVIOR CHANGE AS YOU WORK WITH STUDENTS IN THE ADVISING PROCESS AS A RESULT OF THESE WORKSHOPS?

MALES

Yes 9

No 3

Uncertain 1

FEMALES

Yes 5

No 2

Uncertain 1

If yes, please specify in what ways.

MALES

1. I suspect I have some inward awareness of difficulties with regard to roles which could affect advising.
2. I will be a bit more willing to discuss "nontraditional" goals with female students.
3. I may be more aware of how females may feel - but I'm not sure the female participants were representative.
4. More sensitivity to role stereotyping in my counseling of students.
5. Tell it like it is to all comers.
6. Greater care in the way I speak. Trying to reduce the number of biases I display.
7. I'll try to be more attentive.
8. Cause them to "smooth the path" of women entering their management structure.
9. Try harder to understand differences to be expected by women students. Try to work more equally with them.

FEMALES

1. I do very little advising.
2. Be more aware that not everyone feels she/he is being stereotyped or discriminated against particularly at the jr., sr., or higher level schooling.
3. I will be more aware of my own stereotyped behavior.
4. Uncertain, since I have been aware of problem - probably there will not be much change in my way of advising.
5. Recruitment techniques, curriculum awareness.

9. COULD YOU HAVE BENEFITTED MORE FROM THIS WORKSHOP MATERIAL IF IT HAD OCCURRED AT A DIFFERENT POINT IN YOUR CAREER?

<u>MALE</u>		<u>FEMALE</u>	
Yes	<u>5</u>	Yes	<u>2</u>
No	<u>6</u>	No	<u>5</u>
No answer	<u>2</u>	No answer	<u>1</u>

If yes, please be specific.

MALES

1. Prior to becoming a department head.
2. Not certain.
3. Earlier in my professional career.
4. I have experienced similar workshops earlier in my career and they were helpful.
5. Not really.
6. The earlier the better.
7. I was once in more of a leadership position.

FEMALES

1. If these changes in awareness and opportunity had occurred earlier I might have had a different career.
2. I probably would have become more assertive earlier in my career.

10. HAVE YOUR ATTITUDES AND/OR BEHAVIORS CHANGED AS YOU DEAL WITH COLLEAGUES, MALE AND FEMALE, AS A RESULT OF THESE WORKSHOPS?

<u>MALE</u>		<u>FEMALE</u>	
Yes	<u>7</u>	Yes	<u>7</u>
No	<u>5</u>	No	<u>1</u>
No answer	<u>1</u>	No answer	<u>1</u>

If yes, please be specific.

MALES

1. Professional women are really not aware of their strengths. Men are more capable of getting away with being phony.
2. I think I understand women's concerns better.

3. Less likely to tolerate casual remarks degrading female potential.
4. Treat them as professionals - not females or males.
5. I am more sensitive to feelings of women.

FEMALES

1. I'm more understanding of male colleagues but also more outspoken and assertive in pointing out some MCP tendencies.
 2. More aware of attitudes of male colleagues; try to speak clearly regarding advisement issues and problems of female professors.
 3. Concerted effort to not go "overboard" yet build a positive image of a woman in administration.
 4. I don't stereotype men from "male" fields as much as I used to.
 5. Delighted to know that so many men are at least willing to come and listen - whether they totally agree or not. A positive first step.
 6. I will have to remember that my male colleagues have not progressed as far as I in desiring an androgynous society.
 7. I understand some of the fears and concerns of the opposite sex better.
11. ARE THERE ANY FUTURE TRAINING NEEDS YOU PERSONALLY ANTICIPATE REGARDING REDUCTION OF STEREOTYPING? PLEASE BE SPECIFIC.

MALES

1. I would like to have additional reading materials regarding non-traditional fields, etc. (Newsletter?)
2. More knowledge of career opportunities for men and women in all curriculums.
3. Periodic reminders and updating of changes occurring.
4. More consciousness - raising of non-attending department heads and general faculty, too.
5. Don't think I know all the answers.

FEMALES

1. More on humanizing my management style.
2. Periodic "refresher course" seems appropriate.
3. To observe both males and females in leadership positions.
4. Department/student workshops.

12. QUESTION: ARE YOU STILL IN CONTACT WITH OTHER WORKSHOP PARTICIPANTS?

Responses of:	Rarely		Frequently		
	1	2	3	4	5
Males	3	2	1	1	6
Females	1	1	3	1	2
TOTAL	4	3	4	2	8

13. DO YOU INITIATE THIS CONTACT OR DOES IT OCCUR BY CHANCE? SPECIFY.MALES

1. Chance.
2. Chance.
3. Both. Mainly at campus meetings however.
4. By Chance.
5. Both.
6. Both.
7. Chance.
8. By chance or in usual routine.
9. By some it was chance/have worked on committees with others.
10. Chance.
11. Chance.
12. By Chance.

FEMALES

1. When I need department contact I often prefer to interact with some workshop participants. (Not all!)
2. Chance with a few exceptions.
3. Chance.
4. Some of each.
5. Really both; enjoy the new friendships.
6. It usually occurs when I come to meetings.
7. Both.
8. Both.

14. HOW OFTEN DOES SUCH CONTACT PROVIDE:

A. Support

Responses of:	Seldom				Frequently
	1	2	3	4	5
Males	3	2	2	3	0
Females	1	1	2	1	2
TOTAL	4	3	4	4	2
No response given:				<u>Males</u>	<u>Females</u>
				3	1

B. Information on jobs

Responses of:	Seldom				Frequently
	1	2	3	4	5
Males	2	2	3	3	0
Females	1	2	3	0	0
TOTAL	3	4	6	3	0
No response given:				<u>Males</u>	<u>Females</u>
				3	2

C. Professional information/assistance

Responses of:	Seldom				Frequently
	1	2	3	4	5
Males	1	1	4	4	1
Females	0	0	2	5	0
TOTAL	1	1	6	9	1
No response given:				<u>Males</u>	<u>Females</u>
				2	1

D. Searches for female applicants

Responses of:	Seldom				Frequently
	1	2	3	4	5
Males	6	4	0	1	0
Females	3	1	0	1	0
TOTAL	9	5	0	2	0
No response given:				<u>Males</u>	<u>Females</u>
				2	3

E. Searches for male applicants

Responses of:	Seldom				Frequently
	1	2	3	4	5
Males	7	2	1	1	0
Females	4	0	0	1	1
TOTAL	11	2	1	2	1
No response given:				<u>Males</u>	<u>Females</u>
				2	2

15. HOW IMPORTANT IS THIS CONTACT TO YOU:

Responses:	<u>Males</u>	<u>Females</u>
a. Nice, but not critical	6	2
b. Useful	5	5
c. Absolutely necessary	1	1
No response given:	<u>Males</u>	<u>Females</u>
	1	0

16 ESTIMATE HOW MANY WOMEN ADMINISTRATORS/FACULTY THERE ARE ON CAMPUS
AT YOUR LEVEL AND HIGHER.

MALES: 50, 9, 4, 80, 2-3, 4-5, 3, 12, 12

No responses given: 4

FEMALES: 15, 6, 6, 1, 4-5

No responses given: 3

WHAT ARE THEIR POSITIONS (if known)?

MALES

1. Director of General Studies, Assistant Dean of Student Affairs and Services, Assistant Dean of Nursing, Head V.P.
2. Department Head, Dean, V.P.
3. Director, Assistant Dean, V.P.
4. Don't know.
5. Assistant Professor to acting V.P.
6. Professors

FEMALES

1. 4 Assistant Deans, Assistant Director of Admissions.
2. Affirmative Action Officer, Acting Dean of Graduate School, Dean of Nursing.
3. Graduate Dean, Director of General Studies, Assistant Dean of Letters and Sciences, Head of Modern Languages, Dean and Assistant Dean of Nursing, Director of Admissions, Director of Home Ec, Director of Library, Director of Focus, etc.
4. Assistant Deans and Directors.
5. Department Chairperson

17. WERE THEY PROMOTED INTERNALLY OR RECRUITED FROM OUTSIDE. (Please give routes to job if known,)

MALES

1. More internally? I don't know.
2. A mix of both internal and external - all with search committees.
3. Both, most young ones were recruited.
4. Externally via search committee.
5. Don't know.

MALES

6. Both.
7. Internally.
8. One inside and two outside.
9. Three promoted within, one outside.
10. Unknown.

FEMALES

1. Don't know.
2. Both.
3. About 50-50. Some from faculty positions, some through national recruitment.
4. Don't know.
5. Two outside, rest internally.
6. Both I presume, but most internal.

18. HOW ADEQUATE DO YOU FIND THIS INSTITUTION'S EFFORTS TO ENHANCE
OPPORTUNITY FOR WOMEN IN ADMINISTRATION?

Responses of:	Poor				Excellent
	1	2	3	4	5
Males	0	3	3	6	0
Females	1	4	2	1	0
TOTAL	1	7	5	7	0

No response given:

Males	Females
1	0

19. HOW ADEQUATE DO YOU FIND THIS INSTITUTION'S EFFORT TO ENHANCE
OPPORTUNITY FOR MEN IN ADMINISTRATION?

Responses of:	Poor				Excellent
	1	2	3	4	5
Males	0	1	3	8	0
Females	0	1	1	4	2
TOTAL	0	2	4	12	2

No responses given:

MalesFemales

1

0

20. HOW OFTEN DOES YOUR JOB BRING YOU IN CONTACT WITH:

A. Students

Responses of:	Rarely				Frequently
	1	2	3	4	5
Males	0	0	0	2	10
Females	1	0	2	0	5
TOTAL	1	0	2	2	15

No responses given:

MalesFemales

1

0

B. Male faculty

Responses of:	Rarely				Frequently
	1	2	3	4	5
Males	0	0	0	2	10
Females	0	2	1	3	2
TOTAL	0	2	1	5	12

No responses given:

MalesFemales

1

0

C. Female faculty

Responses of:	Rarely				Frequently
	1	2	3	4	5
Males	1	3	1	1	6
Females	0	0	2	3	3
TOTAL	1	3	3	4	9

No responses given:

MalesFemales

1

0

D. Male Administrators

Responses of:	Rarely				Frequently
	1	2	3	4	5
Males	0	0	0	2	10
Females	0	0	1	3	4
TOTAL	0	0	1	5	14
No responses given:					
			<u>Males</u>	<u>Females</u>	
			1	0	

E. Female Administrators

Responses of:	Rarely				Frequently
	1	2	3	4	5
Males	2	3	3	2	3
Females	0	0	2	1	5
TOTAL	2	3	5	3	8

F. Other Administrators through attendance at conferences, meetings, etc.

Responses of:	Rarely				Frequently
	1	2	3	4	5
Males	1	2	3	1	5
Females	0	1	2	2	3
TOTAL	1	3	5	3	8
No responses given:					
			<u>Males</u>	<u>Females</u>	
			1	0	

21. DO YOU FEEL THAT THERE HAVE BEEN BARRIERS TO YOUR CAREER PROGRESS?

Responses of:	<u>Males</u>	<u>Females</u>
None	4	0
Some, but easy to overcome	4	3

Please specify:

MALES

1. Lack of administration set rules.
2. Higher male administrators.
3. Most academic jobs are in large cities and higher administrative jobs demand considerably more socializing - I like neither.
4. My own failings and priorities.

FEMALES

1. Marriage - less mobility
2. My speciality is not considered as important as more "masculine" areas like budgeting, research, etc.

	<u>Males</u>	<u>Females</u>
A great many, Difficulty to overcome	4	4

Please specify:

MALES

1. Too little institutional support.
2. Career stereotyping.
3. Gaining practical experience, getting degrees, competing for jobs.
4. Lack of administrative know-how. Self-made administrators. Good Old Boy Basis for support groupings and promotion. Mostly reflections of Lack of Real Administrative know-how plus their own personal immaturity psychologically. Administrators whom (judged from their behavior) don't understand or want to share power in a democratic fashion with either faculty, students or people in the State.

FEMALES

1. Especially initially when my interest was in Zoology and Vet Medicine.
2. Lack of experience - youth and enthusiastic; female!
3. Lack of scholarly research credentials at other universities precipitated career change. Lack of administrative experiences.
4. Women have not been encouraged to be educational administrators or to take administrative training. Women have been presented from the usual track to become an administrator - i.e. football coach, athletic director, principal, superintendent, etc.

No response given to this question:

Males

Females

1

1

APPENDIX S

Workshop II Discussion

The second workshop was conducted by outside consultant Dr. Lynda Brown, Equal Opportunity Officer for the University of Montana in Missoula, Montana.

At the onset of the workshop, Dr. Brown discussed with the group the need for confidentiality. It was believed that this was particularly significant for this group since Dr. Brown was from another state institution of higher education in Montana. Due to the subject matter of the workshops, inquiry from colleagues could be expected. To insure privacy, participants were cautioned to tailor their responses appropriately - and the consultant would do the same.

The second workshop, seven hours in length, was designed to follow-up on the first training, moving into new areas, those of interest of the participants and those appropriate to the objectives of the project. The purposes of this workshop as stated by Dr. Brown were:

- (1) To continue examining personal attitudes about male and female roles;
- (2) To examine those attitudes in terms of their impact on campus leadership roles; and
- (3) To examine roles of the participants as teachers and advisors.

The activities of this workshop were more group oriented than the first workshop. A series of exercises were undertaken with the expectation that much interaction would take place among the participants.

1. "I Wish Exercise"

The first exercise involved participants making a mental list of what would come to mind when they asked themselves the following questions:

Women: Sometimes I wish I were a man because

I'm glad I am a woman because

Men: Sometimes I wish I were a woman because

I'm glad I am a man because

Participants were further asked to jot down these ideas and share them with other participants in groups of four.

2. Career Choice Activity

A second exercise involved looking at the process by which the participants ultimately made their career choice. They were asked to examine who and what factors influenced their decision. The second part of the exercise required that each individual fantasize what their careers may have been had they been a member of the opposite sex. These thoughts were shared with other participants in small groups.

3. Advisor Exercises

A third exercise was directed at the participants roles as advisors and teachers and dealt with their contacts with students. The first situation was described below. Faculty were asked "What would you say and do?" Participants were asked to examine their role as an advisor to this student and discuss their thoughts with others in their small groups.

A sophomore woman comes in to see you. She's been planning to be a veterinarian, doing very well in both natural and physical sciences. She tells you she's just become engaged to a promising young musician. She thinks she should switch to nursing so she can support herself and her fiancée sooner so he has time to compose. She can also be more mobile and follow him wherever he needs to go. Her interest tests support her desire to be in veterinary medicine. But her nursing scores and those for other social occupations are low.

The second situation is described below with accompanying questions:

You've come to your office today and are checking today's appointment calendar. You notice at 10 a.m. Terry Jones is coming to see you. Your secretary informs you that Terry wants to discuss an academic problem.

It is 10 a.m. Terry is there to see you.

1. Do you anticipate a male or female student? Why one rather than the other?
2. Is the door open or closed?
3. How do you sit? Where do you sit? Where is Terry?

4. How do you begin?

If the situation is altered to include that Terry wanted to report a case of sexual harrassment by a professor, the question was asked, "Would you expect this to be a male or a female student?" Why?

The consultant asked participants to again move into small groups and discuss their answers to these questions. They were also asked to think and discuss how in their work with students they may treat males and females differently, e.g., closing the door, the language they use, eye contact, and so forth.

4. Job Sharing Proposal

The next activity stressed participants' roles as administrators. They were asked to consider the Job Sharing Proposal and to respond to the following questions.

John Anderson and Sara Stephens are employed as laboratory technicians in the Wood Chemistry laboratory at Western State University. Both are competent and reliable employees with many years of service in their present jobs. In recent months each has run into personal problems.

John is part-owner of a pizza parlor and, because of difficulty getting competent help, he has had to work at the pizza parlor every night and on Saturdays and Sundays, too. The business is quite profitable, and he is counting on it as a source of income when he retires from the University.

Sara, a widow, has an overload problem of a different sort. She has a mentally-ill son in his early twenties. Until recently, the son worked at sheltered workshop five days a week. Recently, however, his psychiatrist advised Sara that her son should be cut back to three days a week at the workshop because the pressure of going to work five days a week

was more than the son could take. For the last three weeks Sara has been staying home with her son on Tuesdays and Thursdays and coming in at night and on the weekend to keep up with her work.

John and Sara have begun to think about cutting back to half-time work. Although there are no part-time jobs in the lab, they reason that they could both share John's job and a new person could be hired to take Sara's job. According to their plan, John would work Tuesdays and Thursdays, Sara would work Mondays and Wednesdays, and they would alternate working on Fridays. There is nothing about the job itself that would make this arrangement difficult.

Sara and John have submitted to their department head a formal proposal to split the job in this manner. Their supervisor has brought it to the attention of the personnel manager for advise.

Questions for Discussion

1. Assuming that John and Sara could handle the job satisfactorily, would there be any other problems with this job-sharing arrangement? How might these be dealt with?
2. What are the possibilities for doing this sort of thing on your own campus? What are the advantages, costs and stumbling blocks?
3. Do you think job sharing should be encouraged or discouraged? Why?
4. What do you think of the idea of having job-sharing pools on a larger scale, organized to permit husbands and wives to work half-time and share the household and child-care duties?

A general sharing took place when consultant Dr. Brown posed the questions, "How many of you think it would work?" "Why or why not?"

The consultant posed more questions to the group for them to think about and discuss.

"Students come to college as girls but fail to leave as women. Do you agree or disagree?"

"Students come to college as boys but fail to leave as men. Yes or no?"

The answers are not both yes nor both no. Why is there a difference?

How do you see your role in altering either statement?
Discuss your responsibilities to students and to others on campus.

5. Strategy for Change

In the final exercise of the workshop participants were asked to imagine that they were responsible for developing a program to change sex role attitudes among the MSU staff. In small groups they were asked to develop a flexible strategy with clear and measurable outcomes for effecting change in the next year. In the larger group, notes were synthesized to develop master strategies.

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272

APPENDIX T

OFFICE OF THE PRESIDENT

MONTANA STATE UNIVERSITY, BOZEMAN 59715

December 1, 1977

TO: Selected Department Heads/Director
FROM: William J. Tietz *WJT*
SUBJECT: Retreat on Attitudinal and Behavioral Change --
Fairmont Hot Springs

Montana State University has been fortunate enough to receive an HEW grant for an experimental program designed to determine and modify attitudes and behavioral patterns involved in sex role stereotyping and sex bias in vocational choice. This is an area of considerable national interest, with important local implications. Although there is a strong tendency to disclaim personal tendencies to bias and stereotyping, all the evidence is to the contrary. Such evidence suggests that we react in a way that inhibits our acceptance of the non-traditional status of the sexes. In order to help understand this problem, the HEW people have provided funding for a workshop and we encourage each recipient of this letter to participate in the program, both for your own and the corporate benefit of MSU. The leaders of the retreat come to us with outstanding credentials and reputations (vitas attached). Additionally, you will be able to enjoy a pleasant day and a half at Fairmont Hot Springs, all costs defrayed by the project (personal liquor bills excepted).

The retreat will begin at 5:00 p.m., Thursday, January 5, with a supper of your choice. A work session follows from 7:00 - 10:00 p.m. and will continue on Friday, January 6, from 9:00 a.m. - 5:00 p.m. (see abstract). It is important that our top leaders receive this opportunity for professional and personal development.

If you have any questions, contact Dr. Peggy Leiterman-Stock in the Dean of Students' office at Extension 2826. More importantly, by December 9, call Dr. Leiterman-Stock to volunteer and make your reservations. Please give this a high priority.

WJT:mk

APPENDIX U



STUDENT AFFAIRS & SERVICES

MONTANA STATE UNIVERSITY, BOZEMAN 59715

December 19, 1977

Dear Colleague:

Thank you for your interest and support in the Research Project. Your cooperation in taking the pre-test was especially appreciated.

As a result of our random sampling procedure, you have been selected as one of the Department Heads/Directors to be in the experimental group of the Project. This means that we are happy to request that you join your colleagues in what we believe will be an exciting, informative experience that will add greatly to your personal and professional growth and effectiveness as an educator and administrator at MSU.

The retreat at Fairmont Hot Springs will be held the evening of January 5 and all day January 6. As was earlier stated, Dr.'s Kanter and Stein, leading consultants in the field, will be present to conduct the workshop.

We suggest car pools as a form of transportation. Dr. Tietz and myself will be driving. I suggest you leave around 3:00 p.m., as dinner is at 6:00 p.m.

Although we promised you a choice of meals, the Conference Director, Ms. Alcorn, has suggested we limit food choices in order to make our meals as nice and also efficient as possible.

Thursday we are offering prime rib or shrimp. Friday morning is "eat on your own", but please stay within a \$2.00-2.50 range. Lunch Friday will be beef burgundy with salad and beverage.

Please call our office 994-2826 as soon as possible and leave your meal orders. We need to know how you would like your prime rib and if you want meat or fish. Also, if anyone requires a special diet, please let us know.

The retreat at Fairmont Hot Springs will be informal, and we hope, enjoyable for all participants. Dress comfortably! Time may allow for some leisure so don't forget a swimming suit if you want to swim or utilize the sauna. No promises, however.

We are looking forward to this exchange of ideas and hope you are too. If you have any questions regarding the retreat or any part of the Project, please feel free to call me. I will be on campus through December 24. Enclosed is a list of participants. Have a happy holiday!

Sincerely,

DR. PEGGY LEITERMAN-STOCK
Assistant Dean of Students

TELEPHONE (406) 994-2826

P.S. Rooms at Fairmont will be provided on a double occupancy accommodation basis. Roommates will be assigned.

APPENDIX V

Dear Colleague:

Thank you for your interest and support in the Research Project involving Heads of Departments at MSU. Your cooperation in taking the Pretest was especially appreciated.

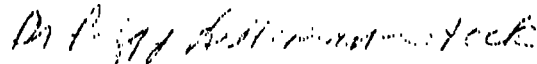
You were selected by Randomization Process as one of the Department Heads/Directors to be in the Control group. As you know that means that you will not be asked to attend the Workshop Retreat at Fairmont Hot Springs in January or participate in the later seminars schedules on campus.

Because we feel the material to be presented at the Retreat is of prime importance to all administrators at MSU, arrangements will be made to provide a special two hour seminar on campus by Dr's. Kanter and Stein for those interested in attending. If you are interested in this please speak to the assistant dean in your college.

In addition, we are looking at the possibility of videotaping lecture material that will be presented at Fairmont Hot Springs. In the event that this is possible we will make arrangements so that you and others in the Control group may view this material at a later time if you are interested in doing so.

Again, thank you for your cooperation. We will be contacting you at a later time to ask you to take a post test. We hope you again will assist us with this matter.

Respectfully,



Dr. Peggy Leiferman-Stock

APPENDIX W

Dear Volunteer:

Thank you for coming today for this pretesting activity. Your cooperation is greatly appreciated.

Please answer all of the questions on the questionnaire. As this is a research project it is necessary that we ask that you not discuss the nature of this questionnaire with any of the faculty until Monday, December 19, 1977.

In an effort to insure anonymity of those persons completing this questionnaire, we also ask that you note no other identification on the answer forms or booklets other than what is requested. The post test will be matched with the pretest by use of a "Code" identification process. If you have any questions after reading the instructions please consult the test monitor.

When you have completed the questionnaire enclose your answer sheet and Demographic Data Form in the envelope provided, with the word Pre written on the outside of the envelope. Return all the materials to the test monitor.

Have a happy holiday. You will be hearing from us by this Friday, December 16, 1977, with regards as to whether or not you were chosen by random sampling to be in the experimental or control group.

Thank you.

Dr. Peggy Leiterman-Stock



MONTANA STATE UNIVERSITY, BOZEMAN 59715

January 9, 1978

Dear Participant:

As you know, your participation in the Workshop Retreat at Fairmont Hot Springs is a part of a HEW Research Grant made available to Montana State University. As stated at the Workshop, a necessary element of this research grant is pre and post testing.

Arrangements have been made for post testing of all participants this week Monday through Thursday. The testing will be held in the President's Conference Room in Montana Hall at the following times:

9:00 a.m.
11:00 a.m.
1:00 p.m.
3:00 p.m.

Please come on the hour and allow one hour for testing.

Sincerely,

A handwritten signature in cursive script that reads "Dr. Peggy Letterman-Stock".

DR. PEGGY LETTERMAN-STOCK
Assistant Dean of Students

PLS/lg

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277
APPENDIX Y

STUDENT AFFAIRS & SERVICES

MONTANA STATE UNIVERSITY, BOZEMAN 59717

May 19, 1978

Dear Participant:

The project at M.S.U. involving workshops designed to increase awareness and reduce sex role stereotyping is nearing completion. We want to thank you wholeheartedly for your cooperation and assistance.

The research requires a final post-test. We ask one last favor of you---only 30 minutes of your time to complete the Attitude Index which each of you have taken previously. This questionnaire is simple and easy to complete. The longer questionnaire requiring your estimation of distance between two concepts will not be used.

As some of you may be aware, a graduate student is conducting the research and will be utilizing the results of these questionnaires for a graduate project. The data is being handled with strict confidentiality and will be used only in composite form.

The final testing will be held May 25th & 26th in the President's Conference Room in Reid Hall. As a special kindness to the graduate student trying to gather this data we ask that you give this testing session your highest priority. Please put these dates and times on your calendar. Special testing on an individual basis will not be possible; as you know this weakens the research and poses special problems for the researcher.

Testing will be held May 25th and 26th in the President's Conference Room at the following times:

9:00 a.m.	12:30 p.m.
9:30 a.m.	1:00 p.m.
10:00 a.m.	1:30 p.m.
10:30 a.m.	2:00 p.m.
11:00 a.m.	2:30 p.m.
11:30 a.m.	3:00 p.m.
12:00 p.m.	3:30 p.m.

Thank you.

Sincerely,

Dr. Peggy Leitterman-Stock
DR. PEGGY LEITERMAN-STOCK
Assistant Dean of Students

TELEPHONE (406) 994-2826

Judith A. Wiseman
(Researcher)



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Wiseman, Judith A
Attitude and behavioral
change in academic advis-
ors at Montana State
University

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	<i>417 L. Miller</i>
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