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AN ASSESSMENT OF ATTITUDES OF FACULTY WOMEN AND FACULTY
MEN TOWARD FACULTY WOMEN IN SELECTED DEPARTMENTS AT
MICHIGAN STATE UNIVERSITY

Michigan State University

PH.D.

1980

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AN ASSESSMENT OF ATTITUDES OF FACULTY
WOMEN AND FACULTY MEN TOWARD FACULTY
WOMEN IN SELECTED DEPARTMENTS AT
MICHIGAN STATE UNIVERSITY

By

James N. Nevels

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ABSTRACT

AN ASSESSMENT OF ATTITUDES OF FACULTY WOMEN AND FACULTY MEN TOWARD FACULTY WOMEN IN SELECTED DEPARTMENTS AT MICHIGAN STATE UNIVERSITY

By

James N. Nevels

Purpose of the study. The study was conducted to explore attitudes and opinions of selected faculty women toward other faculty women, and to explore attitudes and opinions of selected faculty men toward faculty women in higher education.

Procedures and sources of data. Data utilized in the study were obtained from responses to a mailed questionnaire to 59 faculty women and 165 faculty men. A response rate of 60 percent was obtained from 42 faculty women and 88 faculty men from selected departments in two separate colleges at Michigan State University.

Using the statistical procedure, analysis of variance, comparisons of the two groups' responses across colleges to each category of items on the attitude survey was conducted.

Conclusions. The findings of this study revealed significant differences in opinions and attitudes between faculty women and faculty men on ten of the fifteen categories under investigation. Although faculty women and faculty men expressed no significant differences in expressed attitudes and opinions with regard to faculty women in higher education in terms of tenure, personality characteristics, research and other scholarly writing, use of full potential, and alternative work patterns, significant proportions differed in their beliefs with regard to employment opportunities, promotion, pay, career development, job mobility, teaching effectiveness, contributions to the profession, acceptance by associates, and job satisfaction. As a result, several conclusions were derived from the data of this study:

1. In sharp contrast to their male colleagues, faculty women did not believe that employment and advancement opportunities were equal in higher education. For example, women believed that hiring differentials, as well as rank and salary differentials, favored men.

2. Women were fairly adamant in their expressed opinion that their professional commitment was as strong as their male counterparts. Although they did admit that they do not believe they are as geographically

mobile as men, they do not believe that their turnover rate is higher than that of men.

3. The findings showed fairly consistent agreement between faculty women and faculty men across colleges that faculty women are more effective as teachers than faculty men; however, men were more adamant in their insistence of no sex differences in this category.

4. While men reported that they believed that faculty women feel accepted and supported by male colleagues, women, on the other hand, disagreed. Women indicated that they did not think they were taken seriously when sent out to represent the university, and they believed that their male colleagues, too often, tended to patronize them and to make hostile comments about them.

5. Similarly, the data indicated that men faculty members tended to believe that women were more satisfied with their positions than were the expressed opinions of women faculty members. The majority of faculty men felt that, on a whole, women were satisfied with their jobs; however, women indicated that they were not satisfied with their positions, although they were satisfied with certain aspects of their jobs, such as the relationships they have had with their department chairpersons.

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The writer wishes to express special acknowledgment to his committee chairman, Dr. Richard L. Featherstone, for his careful guidance, sincere concern and overall vital role that he played in helping this writer to accomplish what at times seemed a very distant, but always challenging, goal. Dr. Featherstone's sensitive and competent assistance helped to make this journey into scholarship a memorable experience.

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CHAPTER 1

INTRODUCTION

No more persistent problem exists in higher educational institutions, and few more difficult, than that of the present status of female faculty in the colleges and universities throughout the nation. Against a backdrop of anticipated enrollment decline and financial stringency, the complex nature of the problem of equal opportunity for female faculty members derives from the fact that in discussing this important question, academic administrators are forced to come to grips with the fundamental aims and purposes of higher education, its profound influence on the various dimensions of society, and the increasingly pervasive influence of society on this major institution.

When Herbert Spencer raised the question, "What knowledge is of most worth?" in contemporary translation he might well have asked, "Of what value is each school worth?" This profound question stimulates inquiry into moral as well as secular issues. For example, a thorough examination of the problems facing women in academe illuminates the central question of our time;

that is, it raises the question, ideological in nature, as to whether or not our educational institutions are just institutions. Is there a clear national trend in our institutions of higher education for the provision of equality of opportunity for all faculty members in general, and female faculty in particular? The question also involves the ambiguous issue of practicality. In the next decade or so, declining enrollment and financial exigency will continue to be of increasing concern to educational administrators. The need for viable options will become more and more urgent and women in academe could very well play a significant and dramatic role in the resolution of these complex issues, an important point that needs statement in its historic setting.

Historically, administrators faced a similarly challenging problem in the mid-nineteenth century. What happened? Stimulated by female activists with ideological conviction that they were entitled to the same educational opportunities as men, administrators in institutions of higher education were compelled to admit women into formerly all-male private and public institutions. In addition, economic pressures: the Civil War, economic depressions and dissatisfaction with the curriculum combined to produce shrinking masculine enrollments forcing some colleges to close their doors,

and threatening others. Economic necessity, then, provided the impetus for administrators to lift traditional barriers toward women, to abandon current institutional practices, and to capitalize on this potential source of tuition revenues by permitting women as legitimate students. As a result, colleges designed particularly for women were established, and others recruited both men and women. Therefore, ideological, but more importantly, economic considerations were responsible for nineteenth century breakthrough in admitting women to colleges on an equal basis with men.¹

The present condition of our economy, and other social trends make the educational problems in the latter half of the twentieth century, in many respects, comparatively and uncomfortably similar to problems faced by administrators in the mid-nineteenth century. According to Parker, the expiration of G.I. benefits in 1976 resulted in a decrease of over 33 percent in masculine enrollment in post-secondary institutions that may have exceeded 500,000 in the nation as a whole; economic recessions and slowdowns, increasing inflation, limitations on student financial aid, and increasing rise in student fees have been contributing factors to

¹Patricia Alberg Graham, "Women in Academe," Science 169 (September 1970):1284.

anticipated enrollment downturns over the next several years.²

A major concern of women faculty members in higher educational institutions, however, lies in discovering clues as to how educational planners are reacting to current crisis. Although evidence on effects of present trends on women in academe is not substantial, some reports do suggest that proposed measures to deal effectively with increasing problems seem to fall into two categories: (1) emergency and somewhat traditional policies that threaten to impede efforts of faculty women to achieve equality of opportunity, and (2) more forward, practical recommendations that recognize female faculty as key elements in facilitating measures designed to offset potential losses and improve the delivery system of post-secondary institutions. Although exploration of the first category is necessary for a comprehensive understanding of the problem, it is only sufficient for this research to be primarily concerned with those measures identified in the second category.

Authoritative studies have indicated that high priority must be given to long-range planning involving

²Garland Parker, "Higher Education Enrollments: Implications for the 1980s," Topical Paper No. 8 (June 1977), p. 7.

measures to offset enrollment downturns, to make more effective use of institutional resources, and increasingly to improve the quality of post-secondary education (Carnegie Commission on Higher Education). Lack of such planning will produce a number of "endangered species" in the academic community.³ Elaborating further on this point, Parker states:

These could comprehend not only certain categories, but also faculty and administrators, and even many institutions, both public and private. Also, some of the tender plantings in the academic garden over the last decade, such as educational development programs, for minority and disadvantaged groups, studies related to women and ethnic groups, and various other innovative curricular developments could be among the first victims of the academic cutting knife.⁴

Other disadvantages cited by Parker include the prospects that faculty could face possibilities of heavier student loads, and larger classrooms. Even research activities and graduate programs may face cut-backs, along with duplicative academic programs. Fewer new faculty positions may be expected and retrenchment practices have been considered.⁵

Such considerations, of course, could have adverse effects on women. For example, the common

³ Ibid.

⁴ Ibid.

⁵ Ibid., p. 8.

criteria used for determining personnel to be laid off is length of service. Having only recently penetrated the system to any significant degree, academic women are heavily represented in the lower ranks, and are more frequently found among the non-tenured members of most faculties in colleges and universities. A report from the National Center for Educational Statistics (NCES) labeled Conditions of Education points out that as of 1975-1976 women as percentage of full-time instructional faculty on nine- to ten-month contracts in institutions of higher education were 24.2 percent of all ranks; they represented 9.8 percent of all professors; they constituted 16.8 percent of all assistant professors, and they numbered 40.5 percent of all instructors.⁶

It is not difficult to understand the concern of professional women in academe as to how educational administrators are reacting to current enrollment and fiscal problems. They fully understand the meaning of the slogan "Last hired, first fired." Strommer sums up the discouraging trends in the progress of women faculty members in her statement that, "Despite glowing newspaper accounts of female firsts, despite HEW and Affirmative Action, the progress academic women have

⁶ National Center for Educational Statistics, Conditions of Education (Washington, D.C.: U.S. Department of Health, Education, and Welfare, 1975), p. 71.

made in the last thirty-five years looks like a perverse version of the children's game of giant steps--two back for each one forward."⁷

On the whole, it appears that educational administrators can opt to view the current crisis only within the context of major difficulties, or they can be encouraged to take a more balanced perspective. While the traditional approach practiced by some administrators serving within financially strapped institutions includes the utilization of such cost-cutting techniques as hiring freezes, freezing, and, in some cases, eliminating tenure altogether, work sharing, and early retirement, there are also solutions to current problems that offer opportunities. What is needed are data and information helpful in compelling administrators to perceive current problems from a more favorable position.⁸

A more forward and practical approach for twentieth century educational administrators, within the context of justice and economic realities, is the method that worked for mid-nineteenth century administrators.

⁷ Diane W. Strommer, "Wither Thou Goest: Feminism and the Education of Women," Journal of NAWDAC 39 (Winter 1976):81.

⁸ Equal Rights for Women Project, and Education of the States, Retrenchment on Education, Report No. F76-9 (Education Finance Center: Department of Research and Information, May 1977), pp. 30-31.

When masculine enrollment dropped, threatening educational disaster for large numbers of institutions, mid-nineteenth century administrators sought new female clientele. By capitalizing on that potential pool of women who eagerly sought and welcomed the new educational opportunity, administrators not only made the institutions more just, but also made more effective use of available human resources in a period of economic crisis.

Today, efforts on the part of individual institutions to achieve more effective use of its resources, and thereby contribute to more effective use of resources within the larger society are given support by the research. The Carnegie Commission on Higher Education book titled The More Effective Use of Resources: An Imperative for Higher Education recommends that institutions emphasize the need to make wise decisions regarding allocation of resources, use of faculty, and adaptation to changing needs.⁹ As in the mid-nineteenth century, no greater pool of human resources (excluding minorities, of course) exists in the latter half of the twentieth century than in the potential offered by women students. Much of the utilization of this potential may

⁹Carnegie Commission on Higher Education, The More Effective Use of Resources: An Imperative for Higher Education (New York: McGraw-Hill Book Company, 1972b).

depend, to a large extent, on those women faculty members (and men faculty) sensitive to the needs and aspirations of female students. Linked together, as if by destiny, it might be concluded in fact that these two groups could offer meaningful options to current institutional problems.

Factors in institutions serving as major obstacles to retention and recruitment possibilities, however, are recognized by researchers and commentators. Although women outnumber men in completing secondary school, fewer women than men are admitted to post-secondary institutions. Westervelt, Astin and Hornig postulate:

The national ratio now stands at 46 percent women and 54 percent men; while the ablest girls can all get into some college, the best and most selective universities maintain an average ratio of only 40:60, which means that many of our best women cannot get the best degree offered.¹⁰

Other researchers reveal that in the past fifty years proportions of women participating in degree programs have changed very little. Graham reports that in 1920 women constituted 47 percent of the country's undergraduates and received about 15 percent of the Ph.D.'s. In 1930, the proportion was about the same. Women in the 1960s constituted only about 40 percent of undergraduates

¹⁰Lillie S. Hornig, "Affirmative Action Through Affirmative Attitudes," Women in Academia: Evolving Policies Toward Equal Opportunities (New York: Praeger, 1975), p. 10.

and received about 10 percent of the doctorates.

Graham concludes that:

Although the percentage of women receiving doctorates is rising gradually from a low in the late 1950s and early 1960s, it still has not reached the high attained in the late 1920s. Various studies have shown that between 75 and 90 percent of the "well-qualified" students who do not go on to college are women.¹¹

A report by the American Council on Education gives similar data by reporting:

In 1930, women earned 40 percent bachelor's, first professional, and master's degrees, and 15 percent of doctoral degrees. In 1970-1971, women earned 42 percent of bachelor's and first professional degrees, 40 percent of master's degrees, and 14 percent of doctoral degrees.¹²

Existing research clearly and unequivocally demonstrates that almost from the time women enter post-secondary institutions, they face formidable structural barriers to their educational goals. Westervelt identifies numerous obstacles to women students, accounting for their underrepresentation in post-secondary institutions. She has grouped them into five categories including: admission practices, financial aid practices, institutional regulations, differences in

¹¹Graham, op. cit., p. 1284.

¹²Charles Anderson, ed., A Fact Book on Higher Education: Demographic and Economic Data, First Issue/1976 (Washington, D.C.: American Council on Education, 1976), pp. 76.1-76.72.

curriculum planning and student services, and faculty and staff attitudes and behavior.¹³ This research is in part concerned with faculty attitudes and behavior, particularly with attitudes and behavior of female faculty instrumental in the retention of women students currently enrolled in post-secondary institutions, and recruitment of new female clientele.

Concerned about the effects of present trends on schools of education within the larger institution of higher education, Browder points out that one of the major approaches schools of education must take is intensive search for new potential student populations. This administrative leader states, "It must be recognized that the critical factor in determining the value of each school's worth is its own faculty."¹⁴ Recruitment efforts to increase student population have a valuable resource in the pool of potential women students. Female faculty members can be, as Browder claims of all faculty, the institution's "richest resource or its greatest liability."¹⁵

¹³ Esther Manning Westervelt, Barriers to Women's Participation in Post-Secondary Education: A Review of Research and Commentary as of 1973-74 (Washington, D.C.: U.S. Government Printing Office, 1975), p. 3.

¹⁴ Lesley H. Browder, Jr., "Where Are Schools of Education Going?," Journal of Teacher Education XXIX (July-August 1978):52-56.

¹⁵ Ibid., p. 56.

It is perhaps simplistic to observe that academic women are part of the larger institutional structure. What is important is that the interests of each affect the other in significant ways. What does this mean? For faculty women, it means that they have the fundamental right--made legal since 1970--to hold institutions accountable for the disparity between its ideals and its practices. Quite simply, it means that academic women have come to realize that they may no longer tolerate the fundamental contradiction between the institution's ideal of equality and the denial in practice of equal treatment of the sexes. It means that the concept of equal treatment includes the obligation by institutions to eliminate artificial barriers to equality and take affirmative action to overcome past injustices.¹⁶

Further inquiry into the interactive process between women faculty and post-secondary institutions requires examination of yet another question. What can faculty women do to help meet the institutions' needs? The provision of adequate commitment and involvement is necessary on the part of faculty women and institutions

¹⁶This idea, with slight modifications, follows the general point of view of Alan Pifer and Avery Russell, "Responsibility and Public Policy: Is It a Moral Question?" in Helen S. Astin and Werner Z. Hirsch, eds., The Higher Education of Women: Essays in Honor of Rosemary Park (New York: Praeger, 1978), p. 166.

in order to work jointly in the provision of a tenable solution to current crisis. Neither can afford to ignore or subordinate the interests of the other. In a moral sense, equitable treatment of its constituency indicates a willingness on the part of institutions of higher education to become more democratic--to depart from a narrow time perspective. As Rossi points out, "The contemporary college is no longer a local, parochial, social community turned in upon itself, but a cosmopolitan national community of talented professionals."¹⁷ In making this transition from a local to a cosmopolitan institution, the institution needs the resources of its women faculty. In a practical sense, simply stated, the institution needs students. Faculty women can play one of the most decisive roles in the retention of women students presently enrolled, and in the recruitment of new female clientele. They can provide needed role models; they can supply needed support and encouragement; they can help women make more productive choices.

Other support for the proposition that development of an important and unique relationship between women faculty and women students can be beneficial is

¹⁷Alice Rossi, "Discrimination and Demography Restrict Opportunity for Academic Women," College and University Business 48 (February 1970):78.

provided by numerous authors found in the literature of higher education. Elizabeth Almquist and Shirley Angrist found in their own study and from a review of the literature that studies of career-oriented college women showed a need for the influence provided by adequate role models. According to the investigators, "Contact with role models is necessary in order to learn how to perform according to the requirements of the role."¹⁸ Furthermore, Almquist and Angrist suggest:

Students do not become committed to a career field without some positive relationships with role models who display the skills, meet the demands, and consciously enjoy the pleasures to be obtained from the pursuit. The most readily available models for students are first their professors, and second, persons in a given occupation.¹⁹

The authors conclude:

For women, the importance of role model lies in their explication of a lifestyle which incorporates work with family life. Occupational choice alone may be a temporary or changeable matter for a girl, but commitment to an adult life which includes work necessitates some notion of what such a life may be like. Adult career women, either as working mothers, female teachers or acquaintances in a given occupation, can serve as models of this lifestyle.²⁰

¹⁸Elizabeth M. Almquist and Shirley S. Angrist, "Role Model Influence on College Women's Career Aspirations," in Athena Theodore, ed., The Professional Woman (Cambridge, Mass.: Schenkman, 1971), p. 306.

¹⁹Ibid.

²⁰Ibid., p. 320.

Emphasizing the contribution of female faculty to the teaching process and its effect on women students, Rossi cautions institutions not to lose sight of the teaching goal of the enterprise. She writes:

We should show a willingness to value the delayed impact on the younger generation of women students that may flow from having young married women on the teaching staff. For college students to have such a woman as a teacher and model may influence them to persist in their own professional careers rather than withdraw from them, and raise their goals to more demanding positions than they have considered for themselves. To truly value this mission and the potential influence of women faculty upon women students, a university must depart from the parochial concern for immediate status pay-off in the form of current faculty productivity by sharing a society-wide goal of encouraging greater social contributions from young women a generation hence.²¹

There seems to be wide recognition that the goal of equality of opportunity for academic women is more likely to be accomplished through sustained attention to the many facets of the problem than through any single sweeping change. This awareness, along with other factors--women's groups on the various campuses and in various departments, congressional hearings, HEW guidelines and the Women's Educational Equity Act--all tend to account for the abundance of status studies of academic women conducted throughout the college and university environment. Yet, there is a paucity of

²¹Rossi, op. cit., p. 78.

studies assessing the attitudes of those playing key roles in this current social drama; that is, administrators, faculty women, and women students. In addition, little evidence in the literature connecting enrollment problems with the needs of faculty women indicates the necessity for further scholarly effort, as is being proposed in this current research, that has as its objective to focus on the combined attitudes of those whose interests are being increasingly affected by current institutional problems.

Enrollment Trends

Faced with the problem of enrollment decline in a climate of fiscal exigency, administrators in higher educational institutions are forced to reexamine long-term trends regarding recruitment, and staffing policies and practices. Evidence indicates that large annual enrollment increases experienced in higher education since the 1960s have ended with a predicted leveling off in the 1980s. Documentation by Equal Rights for Women in Education and the Education Commission of the States reveal that, in all institutions of higher education, total enrollment almost doubled between 1964 and 1974, increasing from 5.3 million to 10.2 million. However, the report predicts that, "by 1984, enrollment is expected to grow only to 11.6 million or by 14 percent

over 1974."²² There is no question that present and future enrollment trends will directly affect college and university faculty, particularly female faculty members.

Authoritative studies indicate a high correlation between enrollment increases and increases in employment of college and university teachers. In fact, one can conclude that decreases in enrollment could mean at worst retrenchment considerations as a possible solution, or at best, curtailment in the hiring of teachers.²³ In fact, projections by Cartter and Solomon offer even more pessimistic predictions. Their estimates show that, in the fourteen-year period between 1980 and 1994, the number of individuals in the traditional college-age group will decline by 25 percent, resulting in a 1.8 million drop in enrollment. Accordingly, total faculty size will face a 100,000 reduction. They also predict that, in combination with falling enrollments, the financial crisis of higher educational institutions will force student/faculty ratios above the traditional figure of 15:1, therefore, reducing faculty demand even more.²⁴

²²Equal Rights for Women Project, and Education of the States, op. cit., p. 6.

²³Ibid., p. 11.

²⁴Ibid.

Increased concern over enrollment decline in the current period of financial stringency has stimulated educational administrators to place emphasis on retrenchment as a possible solution. How retrenchment has affected faculty members in colleges and universities is difficult to assess. Needed information is often withheld, national and statewide statistics are sparse, and terminological differences among states make comparison difficult. Numerous practices, such as failing to fill vacated positions or renew contracts of probationary or non-tenured faculty, only serve to further exacerbate the problem.²⁵

According to Equal Rights for Women in Education and Education Commission of the States:

Efforts to determine who is bearing the burden of retrenchment by surveying state departments of education and state agencies of higher education have been unsuccessful. Most agencies are not breaking down retrenchment data by sex and race. Such information is politically and socially sensitive, and many agencies may be avoiding a volatile issue. State agencies relegate these requests to the local school and to the individual college or university. However, efforts to survey school districts and institutions of higher education on the numbers of lay-offs due to financial cutbacks and/or the race and sex characteristics of those terminated also have been unsuccessful.²⁶

²⁵Equal Rights for Women Project, and Education of the States, op. cit., p. 11.

²⁶Ibid.

Although present trends are major concerns of all faculty members in post-secondary institutions, they are of considerable concern to female faculty because enrollment and fiscal problems are taking place at a time when women are attempting to achieve significant breakthrough of institutional barriers impeding their career development in the profession. In this sense, then, the current problems are untimely. Suffice it to say, academic women have reason for concern. The common criterion for determining personnel to be laid off is length of service. Despite HEW and Affirmative Action, women's progress over the last thirty-five years in making significant inroads into the system has not been impressive.²⁷ Within the infrastructure, women are concentrated in lower-status, lower-paying positions. Not only has there been a history of slow progress up the academic ladder, but also a pervasive pattern of backward slides has frustrated women's efforts to achieve equality in academe. The higher the academic ladder she climbs, the fewer female colleagues she encounters.²⁸

Even gains made by women over the years have not been sustained. A report from the University of Michigan indicates that in 1971-1972, women represented 19 percent

²⁷Strommer, op. cit., p. 81.

²⁸Ibid., p. 82.

of all faculty, but in 1964 they constituted 22 percent of all faculty; in 1940 they were 28 percent; in 1930 they made up 29 percent of all faculty; and in 1920 they numbered 26 percent of all faculty. According to the report, in over fifty years the percentage of faculty women at all ranks is now 7 percent lower than it was in 1920 and 9 percent lower than it was in 1940. Also, the report revealed that "only 26 percent of women faculty, as opposed to 57 percent of their male counterparts, had tenure."²⁹

The concept of retrenchment as a possible solution creates additional problems. For instance, the issue of tenure, another formidable barrier, places women in the academic job market at a disadvantage compared with men. A survey by the Carnegie Commission on Higher Education reports that women are less likely to have tenure than their male counterparts. Usually granted at the full professor and associate professor level where academic women have comparatively weak representation, tenure status has been a coveted prize some faculty women find extremely elusive. Tenure is usually granted to academic men at an earlier age than women, the survey indicates, and there is a tendency for men to be more heavily represented in the more

²⁹Ibid.

competitive fields like natural sciences in which creativity usually peaks at an early age.³⁰

In a report by Wasserman, reasons for disparity in tenure between the sexes are explained:

Since the proportion of women appointed to tenure teaching positions at academic institutions has been significantly lower than the proportion who have earned doctorates, the proportion of men appointed has been correspondingly greater than that expected from the number of doctoral degrees awarded. As a result, some men have been appointed and promoted who might not have obtained their present positions had they been forced to compete with the total pool of doctorate recipients rather than with the male sector only. Men have occupied a preferred position (in the academic job market) and it is not surprising that they are reluctant to surrender it. This may explain why efforts to eliminate inequities and to encourage hiring and promotion without regard to sex or race are now being characterized as "discrimination against white males."³¹

Until recently, tenure and its provisions for due process served as adequate protection for most faculty, but recent events have made educational administrators more cautious and less flexible in this area. For women, however, the question of tenure is more

³⁰ Carnegie Commission on Higher Education, Opportunities for Women in Higher Education: Their Current Participation, Prospects for the Future and Recommendation for Action (New York: McGraw-Hill Book Company, 1973), pp. 114-115.

³¹ Elga Wasserman, Arie Y. Lewis, and Linda H. Bleiwers, eds., Women in Academia: Evolving Policies Toward Equal Opportunities (New York: Praeger, 1975), p. 2.

complicated. In a recent survey by the American Council on Education, researchers noted that such problems as financial stringency, enrollment downturn, and fewer faculty positions have motivated administrators to question the concept of tenure. While some institutions are making tenure more difficult to obtain, others are setting quotas, and still others are dropping it altogether. Cautious administrators are afraid that too many tenured faculty members will reduce flexibility and control. The report maintains that "between 1968-69 and 1972-73, the proportion of the nation's tenured professors increased from 50 to 65 percent."³² For faculty women, then, the issue of tenure is somewhat ironic. Women, who only recently have secured jobs in higher education, will not be eligible for the security that tenure implies if it is eliminated. On the other hand, tenure presently threatens the job security of women who do not have it.³³

The larger implications deriving out of the present and anticipated future circumstances deserve

³² Elaine H. El-Khawas and W. Todd Furniss, "Faculty Tenure and Contract Systems: 1972 and 1974," American Council on Education Survey, reported in "Fact File," Chronicle of Higher Education, February 18, 1976, p. 9.

³³ Equal Rights for Women in Education Project and Education Commission of the States, op. cit., pp. 25-27.

more considerable attention. Anticipated lean years ahead demand educational planners to place high priority on effective measures to counteract potential losses and to improve the delivery system of post-secondary institutions. Parker warns, "The institutions that wait until '1984,' however, to plan for that long heralded data may find it already is or soon may be too late."³⁴

Institutional administrators hope to offset the declining number of students and solve fiscal problems through emergency methods. However, a more forward approach is needed that recognizes the changes in which our major institutions are presently experiencing. These dramatic changes require academicians to get a handle on just what exactly is happening in education, and the socially disastrous consequences that could follow if administrators fail to see the opportunities in which the current crisis can present. Such an apparent need is already being recognized by researchers who are pointing out the larger implications of the immediate problems. For example, in the joint report by Equal Rights for Women in Education Project and Education Commission of the States, the fundamental point is made that administrators can choose to view declining enrollment as an opportunity. In former years, the

³⁴Parker, op. cit., p. 11.

trend was expansion of teaching staffs in order to keep up with increasing numbers of students. According to the report, overcrowding was the major problem requiring building schools and educating more teachers. In addition, the report points out, "Education required growing proportions of state and local government budgets. Now with decreasing enrollments and existing fixed capital, as well as available teaching staff, it is perhaps possible to increase the quality of education."³⁵

Along the same vein, Parker discusses the promises for the future and points out another important need:

For the first time in our history, we can expect to have the faculty, the expertise, the time, the facilities, and presumably, the interest and concern to support programs for significant student groups which, heretofore, have not occupied prominent places in the educational scene. The big question is whether or not we will have the finances and social support necessary to fund and sponsor the altered service functions that are possible and desirable in the 1980s. In our planning, if we undertake effectively to demonstrate the need, we have to assume the requisite finances and support will be forthcoming.³⁶

Proposed measures to deal effectively with current crisis should consider methods to make more effective use of human resources, including both

³⁵Equal Rights for Women in Education Project and Education Commission of the States, op. cit., p. 1.

³⁶Parker, op. cit., p. 11.

students and faculty. Efforts on the part of individual institutions to achieve more optimal use of resources, thereby contributing to more productive use of resources within the larger society, are supported by the research. The Carnegie Commission on Higher Education emphasizes conditions that must exist for higher educational institutions to accomplish their broad objectives effectively, and recommends that institutions:

. . . must make wise decisions about the allocation of their resources and the use of their highly educated faculties, and they must be prepared to achieve more rapid adaptation to changing needs than has generally been characteristic of higher education in the past.³⁷

The potentialities for survival and even progress in higher educational institutions rest on the emphasis these institutions are willing to place on the three essential points recommended by the Commission--that is, wise decisions as to (a) allocation of resources, (b) use of faculty, and (c) adaptation to changing needs. In this sense, then, the increasing quest of female faculty members to gain equal participation at all levels of post-secondary institutions is quite timely. It serves an economic need, for not only does it have the potential for increasing the quality of education, but also it has the inherent possibilities of

³⁷Carnegie Commission on Higher Education. op. cit., p. 47.

being instrumental in the overall restructuring of one of society's major institutions, while, at the same time, of making optimal use of the human resources.

Through recruitment and retention of the vast reservoir of potential women students, institutions of higher education must themselves undergo a process of organizational restructuring by altering and reducing institutional barriers to the educational and career goals of female students. Success in this effort could ultimately depend on the willingness of institutions to fully employ the assistance and cooperation of most faculty women. It must be recognized at this point that, in the sense that not all male faculty are insensitive to the needs of women students, not all female faculty are sensitive to such needs. Adequate utilization of this valuable resource, however, will require reexamination of the present status of faculty women for the purpose of identifying overt and covert discriminatory practices that could prevent faculty women from providing adequate resources and services to women students.

This need is stressed in the literature and summarized by Freeman who emphasizes how universities manage at one and the same time to incorporate an egalitarian philosophy with an authoritarian structure:

Women students are, theoretically at least, told they are the intellectual equals of men, yet, they observe the lack of women among their teachers and disproportionate staff positions.³⁸

Along the same line, Gold asserts that women in high level careers have the potential to be available as role models, but students may "observe the rarity of the phenomena and infer the conditions which keep it so."³⁹

Only a brief enumeration of facts is necessary to arrive at the conclusion that formidable barriers exist to prevent women from pursuing an education in post-secondary institutions. Factors in the structure and processes at all levels, as well as in the attitudes of both staff and students, operate to mitigate against females attempting to pursue an education in post-secondary institutions.

Institutional change is a multi-variate process. Numerous forces have been successful in identifying factors in institutions that are major obstacles to the educational goals of women students and career goals of female faculty. However, some inroads have been made in overhauling institutional practices incorporated in

³⁸Jo Freeman, "The Revolution is Happening in Our Minds," College and University Business 48 (February 1970):68-69.

³⁹Sona Gold, "Work and Leisure Models: Some Implications for Women's Higher Education," unpublished paper, January 1968, p. 21.

formal policies operating to impede educational goals of women students and career goals of women faculty. Motivated by the women's movement, the intervention of the federal government and the courts, collected data and new research findings, and economic interests of all faculty and staff in academe, including males, women have made this issue one of the most pervasive in the current polemics over educational needs. Progress, albeit limited, has been made in those areas identified by Westervelt as barriers to the status of women students. In addition, the imposition of external forces are pressuring institutions to take a hard look at barriers to the status of women faculty identified in the literature as: recruitment and hiring practices, promotion and tenure, salary and rank differentials, administrative positions, and a host of other practices such as maternity leave, an equivalent to the G.I. Bill for women,⁴⁰ day care centers, and anti-nepotism policies and practices.

Two considerations must be offered at this point. First of all, factors other than those found in

⁴⁰The AFT has proposed a new comprehensive program entitled Educare. One of the components calls for retraining and job upgrading under the proposal for life-long education. Another component calls for more thorough teacher training. Both components offer a variety of public school opportunities heretofore available only to veterans covered by the G.I. Bill of Rights.

formal policies also operate as barriers to the educational and career goals of women. The interaction between staff and students is an important factor in either facilitating or impeding the progress of women students. Favorable or unfavorable outcomes of such interactions largely depend on individual attitudes. Commenting on this factor, Westervelt stresses that obvious barriers to women students are faculty and staff attitudes, not only toward women as students, but also toward their roles as well. These attitudes, that constitute serious impediments to the development of women students, are attributed, in part, to the sex distribution of faculty and staff. Westervelt identifies a variety of negative attitudes toward women students including:

Lack of active encouragement and support, sex discrimination in job placement before and after graduation, overt and covert expression of sex stereotypes and masculine expectations for women's roles and behaviors, absence of female role models among faculty and administrators, and effects of antinepotism rules on sex distribution of faculty and on expectations of women students.⁴¹

The second factor that requires immediate consideration is recognition that, while acceptance of the fact that discriminatory practices operate as barriers to the progress of women at all levels of

⁴¹Westervelt, op. cit., pp. 31-37.

academe, such factors do not necessarily lead to change. Witness the plight of other oppressed and disadvantaged groups in our society: the North American Indian, the colonial black, the pre-industrial child. However, some few sub-groups who eventually attain their goals usually do so by successfully convincing others that changes generated by one sub-group can be beneficial to others both in and outside the sub-group. A few examples should suffice to support this point. Slavery ended for blacks out of political and economic interests more so than moral imperatives. Child labor regulations came as a result of unions' recognition that continuation of such practices increasingly depressed the wages of adult workers. As noted earlier, women were admitted into colleges and universities when masculine enrollment dropped, threatening closure of some schools.⁴²

Both the moral imperative and economic necessity in the 1980s can be met as administrators recognize the strategic position of female faculty in the process of vigorous recruitment and retention of the vast potential pool of women resources. The function of faculty women in this process can be enormous: faculty women can monitor admission practices for women students, they can

⁴²This concept is based on the ideas of Jeffrey S. Kaiser, "Anatomy of an Evolution: Women in Educational Administration," University College Quarterly, March 1979, p. 16.

intervene in value and attitudinal conflicts between male and female students and staff, they have the potential for understanding problems peculiar to women students, they can provide needed encouragement and empathy and they can assist women students in the management of the conflict between career and family interests. In fact, the mere presence of the female faculty member can be destructive to most prevailing myths of the so-called woman's place in our society.

Above all, the most significant consideration is the recognition that in order for female faculty to be effective in ameliorating the limited educational status of women, the improvement of their own status is necessary. The status of faculty women, and their attitudes and perceptions of their status present perhaps the most challenging problem facing educational institutions in the United States today. While the major concern of faculty women is the problem of equality of access of professional opportunities, within this broad context is a host of related problems, not only complex solely in their educational dimensions, but also vastly complicated by being intimately bound to the myriad aspects of the total society and culture. It is essential that such barriers continue to be attacked rigorously and affirmatively at each institution and in each department.

The point that concerns us here, and the fundamental problem recognized by this current research, is the nature of the contribution of faculty women in the recruitment and retention of female resources, and the perceptions and attitudes toward structural barriers imposed by institutions on female faculty that could impede or facilitate this important function.

Statement of the Problem

The purpose of this study was: (1) to survey opinions and attitudes of selected faculty women toward other faculty women, and (2) to survey opinions and attitudes of selected faculty men toward faculty women. The study was designed to determine agreement and/or discrepancies among the survey population with regard to specific issues and operational areas affecting professional career opportunities of faculty women in higher education.

Questions to be Answered

1. Do the expressed opinions and attitudes of faculty women indicate that opportunities are equal for faculty women with regard to employment, advancement, job mobility, personality characteristics, teaching effectiveness, production of research and other scholarly writing, contributions to profession,

acceptance by associates, use of full potential, job satisfaction, and alternative work patterns?

2. Do the expressed opinions and attitudes of faculty men indicate that opportunities are equal?

3. Do the expressed opinions and attitudes of all faculty members of selected departments of University College indicate that opportunities are equal?

4. Do the expressed opinions and attitudes of all faculty members in selected departments of the College of Business indicate that opportunities are equal?

Significance of the Study

The major significance of the study lies in information it contributes to an appraisal of the feasibility of alleviating enrollment problems through the specific measures of recruitment and retention of women students and through involvement of faculty women in this process.

If administrators are generally willing to consider expanding recruitment efforts to include more women students, and if they are willing to utilize women faculty in this process, measures can be instituted to alleviate barriers to women at all institutional levels that could impede the progress of this process. If it appears that such a commitment could be beneficial to

the institution, faculty women, and women students, programs could be instituted to recruit and retain more women students. The characteristics of these programs could be based on information obtained from authoritative sources regarding factors that impede and facilitate women in their educational and career development.

If administrators are unwilling to institute measures for the recruitment and retention of women students, and utilize faculty women in this process, objections by administrators and reasons offered could be objectively validated or refuted. If valid reasons appear, then faculty women will have to find other options to encouraging institutions to recognize barriers to women's educational and career goals. If reasons presented by administrators are invalid, such reasons could provide valuable information to administrators, faculty women, and women students interested in pursuing degrees in institutions of higher education.

This research could be valuable in yet another area recognized as an important need. The portion of this study which concerns itself with the relationship between attitudes of faculty women and faculty men toward faculty women has further implications. The findings from this study could serve as a basis for more intensive research comparing the nature and extent of

the influence of faculty attitudes and behavior against actual behavior and performance of faculty women.

The study also has implications regarding factors that hinder or facilitate faculty women's progress in academe. Although status studies have been conducted on most campuses in compliance with HEW and affirmative action, information is needed concerning the attitudes and feelings of those involved in the process. How women perceive their status and feel about their position on campuses and in departments have much to do with job satisfaction and quality of work performed.

Defintion of Terms

The following major terms will be used throughout the study and are defined to insure clarity and continuity for the reader:

Allocation of resources. The opportunity of available productive agents, human and non-human, among educational institutions engaged in rendering services to society.

Autonomy. The maintenance of the integrity of the self. In successful and wholesome socialization, the struggle between the child's wishes and persistent motives results in the individual's developing self-control and an increasing sense of self-esteem which in

turn generates an abiding sense of autonomy in the person.

Anti-nepotism. Policies and practices by educational institutions that prevent exclusion of relatives or same family members from working in the same institutions or departments.

Attitude. An orientation toward or away from some object, concept, or situation; a readiness to respond in a predetermined manner to the object, concept, or situation.

Administrator. An individual who has formal responsibilities for formulating the policies of the institution through the process of implementing the functional activities of planning, organizing, directing, coordinating, and controlling.

Career. A synonym for occupation or profession carrying, usually, the implication of a high degree of job stability.

Conflict. A struggle over values and claims to scarce status, power, and resources.

Discrimination. A process or form of social control which serves to maintain social distance between two or more categories or groups by means of a set of practices more or less institutionalized and rationalized. The practices employed involve the arbitrary attribution of inferiority on grounds which have little

to do with the actual behavior of those discriminated against, and are frequently in conflict with accepted ideas of justice and fairness.

Double standard. Practices that give one group privileges and another prohibitions around the same issues; e.g., males may have sexual freedom, but females may not.

Electra complex. The incestuous desire of the daughter for sexual relations with her father.

Equality. An "ideal" arrangement of statuses and rights, the moral value of which derives from the extent to which (and the same sense in which) what is common to all persons is not more importantly but infinitely more important than the accidents by which people differ.

Feminine. The role or behavior accepted by a culture for the female.

Fear of success. The motive to avoid success is a stable characteristic of the personality acquired early in life in conjunction with sex-role standards. It is conceived as a disposition (a) to feel uncomfortable when successful in competitive achievement situations because such behavior is inconsistent with one's femininity (an internal standard), and (b) to expect or become concerned about social rejection following success in such situations.

Higher education. Study pursued in a four-year public or private institution leading to a baccalaureate, graduate, advanced graduate or professional degree.

Institution. A public or private baccalaureate college or university considered to have sufficient independence for classification as a separate institution.

Ideology. A pattern of beliefs and concepts (both faculty and normative) which purport to explain complex social phenomena with a view to directing and simplifying socio-political choices facing individuals and groups.

Justice. Used in two senses: (a) giving every person her/his due, and (b) the setting right of wrong either by compensating the victim of wrong or by punishing the doer of it.

Masculine. The role or behavior accepted by the culture for the male.

Myth. The whole word picture held by a social group, and the value system anchored in that picture.

Prejudice. An attitude that is firmly fixed, not open to free and rational discussion, and resistant to change.

Policy. A course of action or intended course of action conceived and deliberately adopted, after a

review of possible alternatives, and pursued or intended to be pursued.

Post-secondary education. Any instruction, research, public service, or other learning opportunity offered to persons who have completed their secondary education or who are beyond the compulsory secondary school attendance age (age 16) and who are participating in an organized educational program of learning experience administered by other than schools whose primary role is elementary and secondary education.

Role model. Usually an individual rather than a group, the role model demonstrates for the individual how something is done in the technical sense. The role model is concerned with the "how" question. The essential quality of the role model is that she/he possesses skills and displays techniques which the actor lacks (or thinks she/he lacks) and from whom, by observation and comparison with her/his own performance, the actor can learn.

Role. By analogy with the actor's role, the kind of behavior expected of an individual because her/his place within social arrangements; e.g., the female role, the male role, the student's role, the teacher's role. Any one person fulfills or adopts numerous roles on varied occasions.

Retrenchment. The practice by institutions of laying off, or cutting back, on staff.

Scapegoating. To blame a person or object for the mistake of others.

Sex role. The behavioral patterns, attitudes and characteristics of members of one sex.

Social problem. A situation affecting a significant number of people that is believed by them and/or by a significant number of others in the society to be a source of difficulty or unhappiness, and one that is capable of amelioration.

Status. Denotes position in a social system involving reciprocal expectation of action with respect to occupants of other positions in the same structure.

Stereotype. An inflexible, rigid, fixed conception that may be only partially true.

Structural barriers. Organizational and institutional patterns, practices, rules, and norms which effectively hinder or halt women in their efforts to enter, remain, or advance in institutions of higher education.

Value. Denotes any object of any need, attitude or desire.

Limitations and Delimitations

Limitations

The principle limitation of the study is that it is concerned only with the attitudes of selected faculty men and selected faculty women at Michigan State University. Further, the study is limited to the degree to which the survey has identified and framed the significant issues raised in the literature on this subject. Additionally, the study is limited by the reliability of the survey instrument and the method of question scaling and coding employed for purposes of descriptive analysis. The study is also limited by the fact that, while the full equality of women is given homage everywhere, few individuals in higher education would have the temerity to avow openly, at least, that women should not have equal treatment with men. Another limitation of the study is its focus on middle-class, predominantly white females. Any instrument constructed for measuring attitudes associated with such a volatile issue as the one under present examination has little resistance to distortion by social desirability of response.

Delimitations

This study was limited to faculty members who were employed in selected departments at Michigan State University during the academic year 1977-78. The

population of this study was taken from the Department of American Thought and Language of University College, and the following departments in the College of Business: Business Law and Office Education, Management, Hotel and Restaurant Management, Marketing and Transportation, and Economics.

Design

To assess the attitudes of women faculty, and men faculty at Michigan State University, a survey questionnaire was mailed to the study population. The study population consists of a selected group of women faculty members ($N = 60$), and a selected group of men faculty members ($N = 164$) from the Department of American Thought and Language of University College and five departments in the College of Business, including Business Law and Office Education, Management, Hotel and Restaurant Management, Marketing and Transportation, and Economics.

The survey instrument, with a cover letter of introduction was mailed to the study population ($N = 224$) requesting the participation of the men faculty and women faculty in the study. Their individual responses remain confidential, as indicated in the cover letter and on the survey instrument. Numerical coding of each envelope containing the survey instrument was mailed to the study population,

permitting identification for follow-up requests of those who fail to respond within three weeks from the date of mailing. Telephone calls will be used as a final measure to those recipients of the survey instrument who will not have responded to the original request or to the written follow-up request to personally ask for their assistance in complying with the survey request.

The assessment of attitudes of women faculty and men faculty in regard to institutional barriers to women at Michigan State University will be based upon questions in the survey instrument which will be developed from issues and criteria defined by the Carnegie Commission on Higher Education, unpublished dissertations, information provided by research conducted in the study area, and by nationally recognized experts in the field of higher education, with regard to barriers to women's participation in post-secondary education as being central to understanding the significant concerns in the study area.

Analysis of survey data in the study will be reported in descriptive and summary statistical formats with accompanying narrative.

Organization of the Study and Overview of Chapters

The study will be reported in five chapters. Chapter 1 will include the introduction, the statement of the problem, the focus of the problem, the significance of the study, the purposes of the study, the limitations and delimitations of the study, the sources of data and procedures, and a statement of the organization of the study.

Chapter 2 will include a review of the literature related to the study.

Chapter 3 will contain the procedure of the study, the instrument of the study, acquisition of the data, and the analysis of the results of the survey of an assessment of the attitudes of faculty women and faculty men toward faculty women.

Chapter 4 will include a comparative analysis of the results of the survey assessing the attitudes of faculty women and faculty men on institutional barriers to faculty women at Michigan State University, and also will include an analysis of continuities and discontinuities of attitudes within the infrastructure of the university.

Chapter 5 will contain a summary of the entire study followed by conclusions and recommendations.

CHAPTER 2

REVIEW OF THE LITERATURE

Extent and Magnitude of the Problem

Undergoing change are numerous of the country's long-term values affecting such major institutional structures as our colleges and universities. Such changes, facilitative of more equity for all members of the post-secondary education society, particularly provide possibilities of more equitable opportunities for faculty women. In the current polemics over higher educational problems, none is so pervasive as the concept of equal educational and professional opportunities for women. It is not a new issue. It was a major ingredient in the drive calling for women's access into the colleges and universities in the nineteenth century. They achieved the goals of gaining acceptance into the country's established colleges and universities, and of establishing outstanding colleges of their own. Then as now, it was mostly economic necessity that turned the tide for women.

In the 1960s and 1970s, motivated by the new feminists and the new women's movement, the dramatic entree of the federal government and the courts, along

with at least two decades of collected data and research findings, and compelling economic interests of a large proportion of faculty members in higher education, the issue of equality of professional opportunity for women faculty has become central, resulting in the identification of both the activities and the writing aimed at defining the status of academic women and attitudes of both men and women faculty toward women in academe. Despite cries of academic freedom and such major problems facing higher education today as the allocation of jobs in an economically static work organization, charges of discrimination against women in higher educational institutions are being made both formally and informally. Institutional methods of recruiting, hiring, upgrading, promoting, discharging and retiring women faculty are all under public scrutiny and open to examination. This review of the literature will cover three significant areas: An Historical Overview of Women Faculty in Institutions of Higher Education, Present Trends in the Equality of Professional Opportunities for Academic Women and Related Literature.

An Historical Overview of Women Faculty in Institutions of Higher Education

Early Significant Trends

Although, as Astin comments, a definitive history of the growth and development of faculty women

in academe has yet to be written,¹ the literature reveals that a few authors have attempted to trace significant trends in women's thrust to attain equality of professional opportunities in institutions of higher learning. The difficulty of such an ordeal becomes increasingly apparent as one begins a thorough examination of the literature. Pollard reminds us that:

Determining just when and where women first entered the college teaching profession is a difficult task. It is reasonable to assume, however, that few if any women entered college teaching before the first women had been educated in institutions of higher education or before a demand was created for women as teachers in collegiate institutions.²

In America, there have been significant factors both stimulating and impeding the progress of women in achieving equality of educational and professional opportunities. While barriers to women's educational growth have been, to a large extent, but not strictly limited to ideological arguments, factors favorable to promoting the cause of the women's movement to gain equal treatment in academe have been identified as mostly economic, social, and political. Foreign

¹Helen S. Astin and Werner Z. Hirsch, eds., The Higher Education of Women: Essays in Honor of Rosemary Park (New York: Praeger, 1978), p. 113.

²Lucille A. Pollard, Women on College and University Faculties (New York: Arno Press, 1977), p. 59.

antecedents largely determined colonial woman's "proper sphere" in the society. One author, John Demos, informs us that in the seventeenth century, male dominance was generally an accepted principle all over the western world.³ Unfortunately, such beliefs were not limited to a particular period of American history. The literature reveals that, then as in the present, the prevailing attitude throughout this country's history determining, to a large extent, the nexus between women and men has been white male superiority and female subordination. Demos reminds us of the fundamental Puritan sentiment on this matter expressed by Milton in a famous line in Paradise Lost: "He for God only, she for God in him."⁴ Consequently, the purposes of early educational systems set up in America were not humanitarian oriented, but were designed primarily to maintain European imported class and sex distinctions, which is what probably led Churgin to conclude that education for women was initially discounted in this country.⁵ As a result, the dominant characteristic of early woman's

³ John Demos, "The Structure of the Household," in Gary B. Nash, ed., The Private Side of American History (New York: Harcourt, Brace, Jovanovich, 1979), p. 53.

⁴ Ibid.

⁵ Jonah R. Churgin, The New Woman and the Old Academe: Sexism and Higher Education (New York: Libra, 1978), p. 81.

education was its variable, and somewhat meager, quantity.

Later periods reveal that women's efforts toward educational and professional equality were met with unsuccessful, but somewhat disconcerting, attempts to thwart their goals. At each stage that women made significant gains, they met resistance, mostly ideological, resulting in a pattern of uneven and halting development. Sociologist Saul Feldman sums up attitudes opposing women and concludes that the "rash of objections" surrounding the idea of women's education was one of the major reasons for its slow development.⁶ The underlying theme of almost all the arguments against women's education was that it defeminized them.⁷ Pollard describes efforts of women to counteract arguments against female education:

Higher education for the young ladies in the United States began slowly and meagerly in the 1800s as the outgrowth of the dreams and struggles of a few dedicated and visionary men and women. As the earlier experience with the young girls' mental capabilities in the academies and grammar schools had overcome some of the prevailing beliefs

⁶ Saul D. Feldman, Escape From the Doll's House: Women in Graduate and Professional Education (New York: McGraw-Hill, 1974), pp. 21-22.

⁷ Ibid.

detrimental to their education, the doors of the higher seminaries of learning were unlocked for them.⁸

Simultaneous with the subtle and not so subtle opposition to women's education were powerful forces working to insure increased opportunities for them.

Economic, social, and political considerations stimulated the cause of women's educational and career development. In many cases, economic incentives stimulated early education of girls, who oftentimes attended school at no additional cost during the summers or in the evenings when the boys were absent; later, the girls were hired to teach in the dame schools, the common schools and the secondary schools at salaries far below those of their male counterparts. The rise of the coeducational movement was also motivated primarily by economics. For example, some colleges were able to remain open by admitting women during crisis periods, such as: the Civil War, periods of depressions, and World Wars I and II.⁹ Further incentives were based on an admixture of social and economic factors. Significant forces contributing to women's advancement in educational and professional opportunities include: the common school movement, the growth of the public

⁸Pollard, op. cit., p. 59.

⁹Mabel Newcomer, A Century of Higher Education for American Women (New York: Harper, 1959), p. 17.

school system described by Newcomer as probably the most significant single factor in women's higher education prior to the Civil War¹⁰; the pre-Civil War colleges for women; the prestigious women's colleges, which, as Baker argues, "led the way in women's intellectual emancipation,"¹¹ and Churgin depicts as "the major impetus to women's education"¹²; and the coeducational movement.

The role played by political factors was far from insignificant. The Morrill Act of 1862, which stimulated the growth of state universities, also advanced educational opportunities for women. As these land-grant colleges developed, taxpayers demanded admittance of their daughters as well as their sons.¹³ The Smith-Level Act of 1914 supported agricultural and home economics instruction, and the National Defense Education Act of 1948 supported teacher training programs in

¹⁰ Ibid., p. 14.

¹¹ Liva Baker, I'm Radcliffe! Fly Me! The Seven Sisters and the Failure of Women's Education (New York: McMillan, 1976), p. 2.

¹² Churgin, op. cit., p. 83.

¹³ Newcomer, op. cit., p. 36.

foreign language, science, guidance, and audio-visual methods.¹⁴

Although it is not within the scope of this study to review in great detail early prejudice against higher education for women or all the factors that played a significant role in their struggle for equal educational and other opportunities, however, an exploration seems necessary for at least two reasons: the importance of attaining some precision in our understanding of these forces operating both for and against the women's educational movement is especially important as they form a baseline against which to measure change in the 1960s and 1970s. Also, long and heated debates over these issues not only held back the movement, but also had much to do with the direction that it took.

Opposition to Equal Educational and Professional Opportunities for Women

Early Attitudes

Originally derived from social and educational patterns of ancient Greeks, perpetuated through the traditions and customs that eventually evolved into old English common law, maintained through the medieval

¹⁴R. Freeman Butts, "Search for Freedom: The Story of American Education," in Stan Dropkin et al., Contemporary American Education: An Anthology of Issues, Problems, Challenges (Toronto: MacMillan, 1969), p. 104.

universities by priestly faculty members and imported to American by the earliest immigrants with essentially conservative social theories, a complex set of attitudes and line of argument permeated colonial culture which stressed the social and intellectual limitations of women. Historian Mary Beth Norton points out that:

The prevailing trend was the fact that many women had been conscripted into bourgeois culture, accepting the notion that a woman's place was in the home. The roles of wife and mother enhanced, but the wider world of business, politics, and public affairs remained in another sphere. This internalized "cult of domesticity" which is usually associated with the nineteenth century, permeated colonial culture.¹⁵

When in 1776 Abigail Adams asked her husband to "Remember the ladies, and be more generous and favorable than your ancestors. Remember all men would be tyrants if they could. If particular care and attention is not paid to the ladies, we are determined to ferment a rebellion . . .," reportedly John chuckled; the Continental Congress ignored her.¹⁶ Mrs. Adams with a self-acquired education extraordinary for colonial America, when most wives of distinguished men still signed their

¹⁵ Mary Beth Norton, "Eighteenth-Century American Women in Peace and War," in Gary B. Nash, ed., The Private Side of American History (New York: Harcourt Brace Jovanovich, 1979), p. 207.

¹⁶ Ibid.

names with a cross,¹⁷ must have known that the reaction of her husband and the body politic was not unusual as one of the prevailing underlying reasons for the insistent agitation against early attempts of American women to achieve equal educational and professional opportunity was deeply grounded in prejudice existing in the traditional ideologies of the period.¹⁸ This conflict in the provision of equal opportunities to colonial women reflected a conflict in values and attitudes. At the heart of the issue, then as now, have been the restrictive nature of sex roles, and the imposition of arbitrary cultural standards of femininity and masculinity and their inhibitions of the natural development of people. Although all people have been adversely affected, to some extent, women have been more intensely affected because they have had their lives somewhat circumscribed to fit within what Demos describes as "this general framework of masculine superiority."¹⁹

The history of women's educational and professional development depicts a movement that progressed, albeit slowly and haltingly. Feldman attributes one important reason for such development to various

¹⁷Baker, op. cit., p. 2.

¹⁸Ibid.

¹⁹Demos, op. cit., p. 54.

anti-feminine objections.²⁰ Howe proposes that the antecedents of such objections can be traced to early discussions of such intellects as Aristotle and Milton.²¹ Howe emphasizes that reading Aristotle on the subject is a way of finding out how little a student may learn from a teacher.²² She provides us with a key statement from the Politics:

We may thus concludes that it is a general law that there should be naturally ruling elements and elements naturally rules The rule of freeman over the slave is one kind of rule; that of the male over the female another The slave is entirely without the faculty of deliberation; the female indeed possesses it, but in a form which remains inconclusive It is thus clear that while moral goodness is a quality of all the persons mentioned, the fact still remains that temperance--and similiary fortitude and justice--are not, as Socrates held, the same in a woman as they are in a man.²³

Thus, as Howe concludes, for Aristotle women should not be educated, or, if viewed categorically as societal equivalence to a slave, then she should be given only that amount of education that will render her useful to males, her masters. Thus, education is controlled through the defining of capability or what Howe defines

²⁰Feldman, op. cit., p. 21.

²¹Florence Howe, "The Education of Women," in Judith Stacey et al., eds., And Jill Came Tumbling After (New York: Dell, 1974), p. 64-75.

²²Ibid., p. 66.

²³Ibid.

as "role-definition,"²⁴ and she argues that:

"Aristotle's voice has prevailed. He and the early church fathers settled the noneducation of women for nearly two thousand years."²⁵

Interpreting Milton's ideas on the subject, Howe finds that his voice illustrates the perpetuation of woman's subordinate status; however, he is more subtle than Aristotle. Milton's ideas on women's education, as interpreted by Howe, are based on the belief that women can be taught, but not to any great extent and only under careful considerations.²⁶ They need to be constantly supervised in order to avoid trouble. Milton's main idea is hierarchy, reports Howe, who goes on to explain that for him, "Woman is subordinate in status, inferior in intellect, and even less reliable than man in matters of the heart."²⁷

In 1907, M. Carey Thomas, sharing her childhood experiences, admits that she "read Milton with rage and indignation."²⁸ "Even as a child," confesses Miss

²⁴Ibid.

²⁵Ibid.

²⁶Ibid., p. 67.

²⁷Ibid.

²⁸M. Carey Thomas, "Present Tendencies in Women's College and University Education," Educational Review, January 1908, p. 65.

Thomas, "I knew him for the woman hater he was."²⁹ Miss Thomas also notes that, when she was old enough, she read the Bible "entirely through with passionate eagerness because I had heard it said that it proved that women were inferior to men."³⁰ She particularly remembered that the account of Adam and Eve saddened her because she felt that Eve's curse might imperil girls' opportunity to go to college.³¹

Prior to the Civil War, the chief role ascribed to women was motherhood; therefore, for colonial women marriage was their principal life's goal. Providing us with insights as to the significant role of the colonial family, Demos suggests that:

For the Puritan settlers of New England, family relationships were of the utmost importance For all but a handful of settlers, trappers, Indian traders, or "renegades" from "civilian"--family ties provided the framework of life Early New Englanders saw the family as the basic building block in erecting a regenerated godly community. That is why in early New England all single persons were required to live within a family; bachelor living was prohibited because no individual, it was thought, was safe from anarchic impulses if he or she lived outside a family fold.³²

²⁹ Ibid.

³⁰ Ibid.

³¹ Demos, op. cit., p. 52.

³² Ibid.

Popular arguments not only determined women's relative position in society, but also her relative position in the family. Summarizing the married woman's overall valuation resulting from sex differentiation, Goodsell maintains that her legal status was a nullity, her economic position markedly inferior, and the scope and extent of her education limited.³³ In sum, her total status was determined by English tradition. Accordingly, most married women were without the benefit of legal status. They could not make a will, enter into a contract, or bring suit for the protection of their interests. Such rights were vested in their husbands, who also had sole rights of guardianships of the children. In economic matters, at marriage early colonial women surrendered all right to the administration of her property, both real and personal, into their husbands' hands who were privileged to enjoy such income without having to give an account of their stewardships.³⁴ In terms of education, some early eighteenth century American women received only that which was necessary to maintain their chief occupation which entailed, according to Goodsell, "bearing a 'quiver full'

³³Willystine Goodsell, Pioneers of Women's Education in the United States (New York: McGraw Hill, 1931), p. 2.

³⁴Ibid.

of children, and carrying on a variety of domestic duties."³⁵ The home, then, was a training school in which mothers instructed daughters in the domestic occupations destined for them. Woody provides Noah Webster's definition of a good education for women in 1790, as that which renders them "correct in their manners, respectable in their families, and agreeable in society."³⁶ Webster argues:

. . . that education is always wrong which raises a woman above the duties of her station Some arithmetic is necessary for every lady and geography should never be neglected.³⁷

But he was imposing the limitation of only a primary education for women. In his history of The American College and University, Rudolph depicts the colonial view of the status of women as:

. . . simply that she was intellectually inferior--incapable, merely by reason of being--a woman of great thoughts. Her functions were not worth training. Her place was in the home, where man had assigned her a number of useful functions.³⁸

³⁵Ibid.

³⁶Thomas Woody, A History of Women's Education in the United States (New York: Octagon, 1966), p. 28.

³⁷Ibid.

³⁸Frederick Rudolph, The American College and University -- A History (New York: Alfred A. Knopf, 1962).

Prior to the nineteenth century, although the prevailing attitude was that formal schooling for girls was not generally accepted, and the colonial style of thinking was that the proper sphere of women was in the home, it is ironic that, along with individual initiative and favorable circumstances, family cooperation was an important factor in the provision of early educational and professional opportunities for women.³⁹ Tracing the trends in the growth and development of women's early efforts that eventually led to their domination of teaching positions in the elementary and secondary schools, Newcomer explains that a variety of patterns was evident. For example, Sara Joseph Hale of Godey's Lady's Book was tutored by her brother of Dartmouth, Emma Willard's sister; Almira Phelps studied with her brother-in-law's nephew who was attending Middleburg; Mary Lyon studied science in the home of Professor Hitchcock; and Elizabeth Cady Stanton studied Greek with the local minister.⁴⁰ Newcomer notes that these early efforts had important significance in the growth and development of women's education. Not only did they provide evidence of the learning capabilities of women, but also they fostered the growth of leaders in the

³⁹Newcomer, op. cit., p. 9.

⁴⁰Newcomer, op. cit., pp. 8-9.

early nineteenth century who were to play an important role in the spread of the movement for secondary education, perhaps the most significant movement in the spread of higher educational and professional opportunities for women.⁴¹ For example, Call indicates that by the 1870s women had already proved themselves to be capable teachers in the dame schools. The common school movement created a demand for teachers which men failed to meet. By the early nineteenth century women dominated teaching positions.⁴² According to Newcomer, beginning early in the nineteenth century, women were employed in the public school system. During the Civil War, the trend was further stimulated by the absence of men and, by 1970, three out of four teachers were women.⁴³

Institutions of Higher Education

Upon inquiry, one finds that further examination of the growth, development, and trends leading to college teaching as a profession for women reveals that at almost every point, significant gains made by women

⁴¹ Ibid.

⁴² Annie Payson Call, "The Greatest Need of College Girls," Atlantic Monthly, January 1882, pp. 102-109.

⁴³ Ibid.

were met with resistance. All along the line from grade school up through high school into seminaries, colleges and universities what Feldman calls the rash of objections to the idea of women's education was a constant pull upon their forward progress. The early contention of the opposition had been that the proper sphere of women was in the home. Regardless of this contention, however, the social demand in the case of needed teachers to command the overpopulated elementary and secondary schools had become so strong that the advantages of adjustment to a practical social need was accepted in preference to the advantages of a type of ideological consistency. As Losee emphasizes: "At the time of the Civil War, more chance was forcefully given to women. They were needed to take the places of the men who were called to fight and educating them became a necessity."⁴⁵

The necessity of educating women, then, was recognized--up to a point. The point at which resistance intensified was at the college level. Consequently, women's next move was to breach the walls of the institutions of higher learning and create the possibility to freely realize their potential for obtaining education and teaching positions at this level

⁴⁵Frances Losee, "Let the Women Learn With the Men," Educational Review, March 1928, p. 167.

and for acquiring the material basis for true independence. In the years just prior to the Civil War, women were getting at least the beginning of a college education. However, those women who wanted to enter the teaching profession at the higher or collegiate ranks met with what Pollard describes as "a marked tardiness and a coldness of welcome."⁴⁶ Call explains that:

In the experiments which have been made to satisfy this demand for the higher education of women, there have been and still are three general forms: the college in which the two sexes meet on equal terms, the annex in which the appliances of an existing college are used for a coordinate institution, and the colleges exclusively for women.⁴⁷

The refusal on the part of old colleges and universities in the East and in the South to admit women made it necessary and desirable for advocates of the women's movement to open separate women's institutions. The discrimination against women was based on such objections as summarized by Feldman:

Although the objections differed in substance, the underlying theme in almost all the arguments against the education of women was that it would somehow defeminize them. Some thought, for example, that women could not physiologically stand the pressures of education Others extended this argument.

⁴⁶Pollard, op. cit., p. 62.

⁴⁷Call, op. cit., p. 102.

Equality of Professional Opportunities
for Early Women Faculty Members in
Institutions of Higher Education

Pollard reports that by 1860 women were on the faculties of at least forty-six private colleges and universities and one state university in seventeen states. For the most part, however, both the institutions and teaching staffs were small with the number of faculty women averaging about 2.6. Their initial professional employment was usually in women's colleges located in the states of Mississippi, Alabama, and Georgia, and also in Illinois. Women were also on the faculty of a few scattered private coeducational institutions of higher learning in Ohio and Michigan. For instance, Elizabeth Academy in New Washington, Mississippi, which existed from 1819 until 1845, employed six faculty women until around the 1830s; in 1835, Jacksonville Female Academy in Illinois employed at least one woman; Georgia Female College had three women on its original faculty in 1839; also, Oberlin College in Ohio had one woman on its faculty in 1835 and, before 1840, seven women were on the faculty there. As male colleges became coeducational in the 1840s, women, who were originally hired to guide the activities of the women students, were given additional assignments to teach one or two academic subjects. For the most part, early women teachers in both women's and coeducational

institutions were products of the early women's seminaries.⁴⁸

Women faculty members were not usually given the title of professor, but were called assistants, assistant teachers, instructors or preceptress. Those who were at the head of women's colleges were usually called principals or presidents and those who were in charge of women's departments in coeducational institutions were usually referred to as principals or preceptresses. Although the title of professor was mainly reserved for men, a few women did manage to obtain appointments to professorships. In 1852 Rebecca Pennell was appointed as professor at Antioch College in Ohio; in 1853 Miss Livonia Benedict, the first woman to earn the A.B. degree in Michigan, was appointed a professor at Michigan's Albion College. Mrs. A. C. Graves became the first woman professor at Mary Sharpe College, Tennessee, in 1859. Incidentally, Mary Sharpe College is reported by some historians to be the first woman's college in this country. The distinguished Maria Sanford was promoted to professor at Swarthmore in 1870.⁴⁹

Although it was a rarity to find women administrators, some few women did achieve that distinction.

⁴⁸Pollard, op. cit., pp. 271-272.

⁴⁹Ibid., p. 275.

From 1843 to 1865 a woman principal headed the Monticello Seminary in Illinois; in 1851 a woman principal was in charge of the Milwaukee Female College; in 1856 the Wisconsin Female College had a woman president; from 1858 to 1867 Athens College in Alabama was headed by a woman; Wheeling Female College had its woman president in 1868. Miss Francis Willard became president of Evanston College for ladies in 1871; later, she became the first woman to serve as dean of a college in a leading university when Evanston College merged with Northwestern in 1875. The first woman president with a Ph.D. was M. Carey Thomas of Bryn Mawr.⁵⁰

Although the trend started somewhat earlier, right after the Civil War in the Northeast and in the South, motivated primarily by the refusal of the older, established men's colleges either to admit women as students or to employ them as faculty members, advocates for equal educational opportunities for women found it necessary increasingly to establish colleges exclusively for women. Throughout the country, however, rapid growth of women teachers in all types of colleges and universities pretty much characterized the period which began in the 1870s. For the years 1890-1891, even though approximately 55 percent of all coeducational colleges

⁵⁰ Ibid., pp. 275-276.

and universities employed women teachers; still, they accounted for only 13.68 percent of the total teaching staff. Moreover, their large representation on the staff of women's colleges, about 71 percent, further reduced their proportion to total faculties in all institutions to about 26.73 percent. The trend was clear that the increasing participation of women as college teachers was firmly established.⁵¹

This trend was traced by Pollard. As she examined the proportion of women on the faculties of various types of colleges and universities, she discovered that forty-one institutions founded before 1860 were known to have employed women on their faculties. Miss Pollard also examined state universities, women's colleges, coeducational colleges and universities, and normal schools as reported to the Commission of Education, and she arrived at certain significant conclusions. For example, she found that in the early women's colleges, the proportions of women faculty were consistently higher than in any other type of school. Women faculty members of the private coeducational institutions founded before 1860 were proportionately smaller than the national average; however, these same institutions had consistently employed a proportion of women

⁵¹Ibid., p. 276.

larger than the national average for all coeducational colleges and universities.⁵²

Acceptance of women on the faculties of the state universities largely depended on the region. In the central or northwest region, state universities led in the professional employment of women. Founded in 1847, the University of Iowa employed a woman teacher by 1859; in 1861 the University of Colorado opened with a woman on its faculty in 1867. On the other hand, the state universities of the eastern and southern areas were reluctant to employ women on their faculties. Slightly less than half of the state universities of the eastern, middle-Atlantic and southern regions did not employ women until after 1910, and the Universities of North Carolina and Virginia were the last of the state universities to employ women as teachers. Pollard points out that in 1961, among all the state universities, the proportion of women to total faculty was 13.83 percent, a figure considerably lower than the national average for all institutions.⁵³ After numerically analyzing women on faculties of all institutions between 1890 and 1962, Pollard observes that:

⁵²Ibid., p. 277.

⁵³Ibid., p. 278.

The proportion of women in all institutions from 1890 to 1911 fluctuated from 26.73 to 23.74 percent; then a gradual rise began, which reached 30.99 percent during the war years of 1945 and 1946. After fourteen years of rapid decline the smallest proportion of women to the total faculties was 21.97 percent in 1962.⁵⁴

Based on comparative rates of increase of women faculty in institutions of higher education, Bernard chronicles the growth of academic women in America by dividing it into four periods. Beginning about 1850 and extending to 1900, the first period featured such pioneers in the field as Maria Sanford, first woman professor in this country; Ellen Richards, first woman student and faculty member of the Massachusetts Institute of Technology; Florence Sabin, first woman student and faculty member of Johns Hopkins University; Alice Freeman Palmer and M. Carey Thomas, woman college presidents, the former of Wellesley and the latter of Bryn Mawr; and such leaders and activists as Vida Scudder, Wellesley faculty member. The period also saw the founding and growth of women's colleges which created the supply and fostered the demand for women's services in the profession. Another feature of the period was the great reform movement of which the demand for equal professional opportunities for women in higher

⁵⁴Ibid., p. 279.

education was a part.⁵⁵ These women were being watched, Bernard comments, as she describes their situation as, "Analogous to that of the girls in the Hawthorn Plant experiment; they were, in effect, cynosures, and they attracted followers who wanted to share their acclaim."⁵⁶

Characteristic features of the second movement from 1900 to 1920 included the growth of the land-grant colleges with its subsequent birth of the home economics movement, and the idealism of faculty women in the various institutions. During the period, while humanistic-oriented academic women from the various women's colleges were concerned with the reforms that agitated the country, those science-oriented women in the home economics division of the various colleges were interested in the practical activity of applying the benefits of science to the activities of the home.⁵⁷

The third period from 1920 to 1930 witnessed a change. Bernard points out that:

By the 1920s the eclat of the earlier years had spent itself, and all of a sudden, as historical and sociological forces operate, the increases in the proportion of academic personnel who were women slowed down. The excitement which had characterized the first generation of academic women ebbed

⁵⁵Jessie Bernard, Academic Women (University Park: Pennsylvania State University, 1964), p. 30.

⁵⁶Ibid., p. 31.

⁵⁷Ibid.

Those academic women were no longer, therefore, in the spotlight, but were taken for granted. Like members of minority groups who strive passionately to be like envied models, once they succeeded they wondered why they should try. They also became less attractive to students as models.⁵⁸

Other factors that accounted for such drastic changes were the various post-war disillusionments. Expected reforms were either not accomplished, or proved disappointing in their results. During this period of the 1920s the proportion of the faculty women increased, though slowly, but the rate of increase declined.⁵⁹

The fourth period from 1930 to 1960 began with both the proportion and the rate of increase of faculty women on the decline. The depression was a contributing factor, but more than economics were involved. It was a matter of supply and demand. Bernard postulates that, on the demand side, women depended on such factors as the nature and number of institutions utilizing their services in addition to such nebulous factors as cultural forces of attitudes, convention, and discriminatory practices. In terms of supply, women were highly influenced by the relative attractiveness of academic positions competing with other careers, including

⁵⁸Ibid., p. 36.

⁵⁹Ibid., p. 37.

marriage, opportunity, costs, and individual motivational factors.⁶⁰

Increasing interest in the status of faculty women in institutions of higher education stimulated further research. Examining one of the earliest records of the status of women in higher education during the early part of the twentieth century, Bernard found that in the Report of the Commission of Education (1916) containing statistics for the school year 1914-1915 that, although women gained admission to more colleges in greater numbers and in greater proportions than in the nineteenth century, still, their representation in the graduate and professional schools was meager. During the year 1914-1915, women received 24 percent of the graduate degrees, mostly the Master of Arts degree. Out of a total of 546 Ph.D.'s, women received only 60 or 11 percent. In professional schools, women comprised only 3.5 percent.

In her review of early studies that surveyed women teachers in institutions of higher education, Pollard writes that in the early 1900s women were located in greater numbers in western institutions, concentrated in only a few teaching fields, relegated in large numbers to the lower academic ranks, and were

⁶⁰ Ibid.

meagerly represented in administrative positions. According to Pollard, the results of a survey of women teachers in state colleges and universities reported by C. H. Handschin in 1912 entitled, "The Percentage of Women Teachers in State Colleges and Universities," revealed that, in all state colleges and universities, the average proportion of women was a little more than 9 percent, about 6 percent east of the Mississippi, but slightly more than 13 percent west of the Mississippi. In the west, more coeducational institutions existed, western women were less conservative, western institutions were founded after women began their thrust for college positions, and western states, suffering from lack of funds, realized that women were cheaper. The study also revealed that in a random selection of eleven higher educational institutions 149 faculty members were women. Of these 149 women, 10 percent were full professors, 5 percent associate professors, 10 percent assistant professors, and 73 percent was in the rank of instructor. Teaching fields in which women were found above the rank of instructor throughout all the states were English, music, modern language, domestic science and home economics.⁶¹

⁶¹Pollard, op. cit., pp. 26-29.

Pollard also reviewed an investigation conducted by Committee W of the American Association of University Professors in 1921, which surveyed 145 institutions to obtain data on policies regarding the employment of women, academic ranks, and faculty salaries. This report showed that, out of 104 coeducational institutions of higher learning, with a total faculty of 4,760, faculty women professors represented 4 percent, with less than 3 percent women professors if the fields of home economics and physical education were eliminated. Again, this study indicates that women were concentrated in the lower ranks with women faculty comprising only 7.9 percent of all professorial ranks, but 23.5 percent of instructorships. In addition, 49 percent of the institutions investigated had no women professors on their faculty, 26 percent had no women of any professorial rank in their college of arts and sciences, and 25 institutions had no dean of women. In one eastern university, cites Pollard, one woman out of a staff of 600 was employed. In another eastern university the dean reported that the officials would not hesitate to seriously consider appointment of any woman who could demonstrate that she was able to perform better than a man. The study also found that women

were paid less salary than men for the same type of work.⁶²

The research division of the American Association of University Women conducted a similar study in 1924. In a report by Ella Lonn, labeled "Academic Status of Women on University Faculties," Lonn studied seventy universities which were members of the Association of American Universities. Drawing conclusions from the results of questionnaires sent to department chairmen, Dr. Lonn notes that the consensus of opinion was that department chairmen do not mind employing women as long as they are not in their departments, and do not hold rank of professor. Citing reasons for the exclusion of women on their staff, Lonn summarized the following: scholarship, broad viewpoint, vigor and aggressiveness in teaching methods, world-mindedness, and mastery of subject matter. Officials seem to believe that women are lacking in many of these areas.⁶³

In another report, Committee W of the American Association of University Professors presented tabulations and a digest of opinions as to various aspects of the work performed by women in college and university

⁶²Ibid.

⁶³Ibid., pp. 30-31.

faculties. The tabulations were based on 130 answers from 86 coeducational institutions and 22 answers from 13 colleges for women. Summarizing the numerous extracts of replies to the question, "How does the teaching of women in your facility compare with that of the men?," the committee reported that, although some respondents admitted to their own naive prejudices when faced with the facts of their own institutions, many felt that the belief so widespread by both men and women teachers that women tend to place undue emphasis on details and not enough emphasis on broad views and principles, making it difficult not to conclude that this opinion must have some basis in fact.⁶⁴ Respondents who stated that women have demonstrated that they can handle as much or more college work than men totaled 110. Of the coeducational faculty members, 46 felt that male students prefer men as teachers and 44 felt that girls also prefer men as teachers; 50 respondents reported that there is no preference because such determination depends on individual teachers rather than sex. Of the men, 81 percent believed women to be as equally successful in college teaching as their male colleagues; however, only 54 percent believed women to

⁶⁴"Status of Women in College and University Faculties," School and Society XXI (January 3, 1925):16.

be successful with advanced classes. In terms of scholarly advancement, 59 percent believed that women continue to advance, and 31 percent believed that they are equal to men as far as productive scholarship is concerned.⁶⁵

An early study of academic women conducted by Hutchinson, who questioned 1,025 women receiving their Ph.D.'s between 1877 and 1924, found that, of the 60 percent respondents engaged in college teaching, most emphasized the importance of obtaining the doctorate for their position. For them, as well as their male counterparts, obtaining the doctorate resulted in substantial salary increase. However, many of the respondents reported that the doctorate did not guarantee equality. They felt that they were discriminated against with regard to obtaining appointments, promotions, and salary increases.⁶⁶

In 1935, the A.A.U.W. National Committee on the Economic and Legal Status of Women wanted to ascertain facts about the economic status of women in universities during the depression period. Specific facts sought by the committee included data on employment, unemployment,

⁶⁵Ibid.

⁶⁶Emilie J. Hutchinson, "Women and the Ph.D.," Journal of the American Association of University Women XXII (October 1928):19-22.

earnings, discrimination encountered, and women's responsibility for dependents. Nearly 10,000 questionnaires were returned. Seventy-nine percent of the women received a year or more of training after leaving college, and 45 percent had taken from one to four years of study. Two-thirds had engaged in some sort of graduate study and 6 percent had obtained a Ph.D. or a professional degree. In regard to age and marital status, these women were pretty well distributed in the five-year classes from 25 to 50 years of age with 7 percent under 25 and 17 percent over 50. Only 13 percent of the women were married, and they tended to be younger than their single sisters.⁶⁷

A large proportion, 69 percent, of the women in the study were engaged in educational work, and one-fifth were executives. These women were not affected so seriously by the depression as might have been expected. In the ten years, 1925 to 1934 inclusive, with the great depression, only 8 percent of the women met more than one period of enforced idleness, and 21 percent had only one such experience. Of the unemployed, one-half were idle for personal reasons and in only 177 cases was it involuntary, a third of the latter because of marriage

⁶⁷ Susan M. Kingsbury, "A Study of the Economic Status of University Women," Journal of the American Association of University Women 32 (June 1939):224-228.

or age. A larger proportion of married women were idle or on part-time work, as were also the younger or less experienced women.⁶⁸

The study revealed that, unless a woman secured the doctor's degree, her time and investment in pursuing educational goals were not reflected in increased earnings. Of the group obtaining the doctorate, 55 percent attained earnings of \$3,000 or more; 33 percent earned \$3,000 to \$4,000, and 22 percent earned \$4,000 or more. Those women with the master's degree earned less than those with the highest degree. Only 17 percent reached \$3,000 or more, but 36 percent earned \$2,500 or more. Of those with only a bachelor's degree, 8 percent earned \$3,000 or more, and 73 percent earned less than \$2,000. The study also showed that 41 percent or 3,618 women were supporting dependents either fully or partially. Of the 3,153 women reporting the extent of their responsibility, 36 percent cared entirely for one or more persons. Only 20 percent of those with dependents reported that they were supporting children. Also, the study indicated that women were supporting dependents on meager incomes: 41 to 52 percent of those with one to

⁶⁸ Ibid.

four dependents earned less than \$2,000, and 61 to 71 percent earned less than \$2,500.⁶⁹

The investigation concluded that women suffer serious discrimination. According to the study:

One third indicated the number of instances that had occurred in the period since 1929 because of sex, marital status, youth, or advanced age. While the last two reasons assigned may apply to men also, the other two could not. And it is sex and marital status that were assigned as causes of discrimination by 70 percent of these women; also many women maintain that they have encountered more than one experience. That is, of the instances cited, 81 percent were given as due to sex and marital status. Although but 13 percent of all women were married, 19 percent of the individuals claiming difficulty indicated marital status as a cause.⁷⁰

The contributions of women faculty to the profession have been the focus of numerous studies. Examining the more than 100,000 biographies of living scholars in all fields of scholarship obtained from the various biographical compilations from three volumes of American Men of Science and the one volume, Dictionary of American Scholars, and recording data for all the women listed in the first fifty pages of each hundred in all four volumes, Newcomer was able to assess women scholars on the basis of such information as: comparison of the number of women scholars with the number of men scholars,

⁶⁹ Ibid., pp. 226-227.

⁷⁰ Ibid., p. 227.

fields to which women scholars are attracted, and kind of formal education that produces them. Her conclusions indicate that estimated percentage of women among the scholars is far below the percentage of women in the college population. The majority of the listed scholars graduated from college between 1900 and 1950 with the peak for women occurring in 1920. Of the total number of students during that period, enrollment of women varied from a little over one-third to a little less than one-half. Thus, the 6 percent estimated women scholars (see Table 1) and total enrollment are considerably disproportionate.⁷¹

When only doctor's degrees were taken into account, Newcomer found that women made up 14 percent of the total, but still accounted for only 6 percent of the scholars. The proportion of women with doctor's degrees was less than half that of the men, meaning that those women who continue their education as far as the Ph.D. are less likely to use their education for further scholarship than men who obtain the degree. Newcomer asserts that family responsibilities and discrimination in various professional fields account for this disparity between men and women scholars. Between 35 and 40 percent of the listed women scholars

⁷¹Newcomer, op. cit., pp. 190-191.

TABLE 1.--Number of Women Scholars, 1956.

Field of Study	Women in the Sample	Estimated Total of Women Listed	Approximate Number of Men and Women Listed	Women as Percentage of Total
Physical sciences	650	1,300	43,500	3
Biological sciences	892	1,784	25,000	7
Social and behavioral sciences	664	1,328	25,000	5
Humanities	1,177	2,354	18,000	13
Total	3,383	6,766	111,500	6

SOURCE: Mable Newcomer, A Century of Higher Education for American Women (New York: Harper and Brothers, 1959), p. 190.

are married. For most women, marriage is likely to prove a handicap as domestic responsibilities interfere with scholarly attainment. Even unmarried women are frequently expected to live in or near the family home, thereby restricting opportunities in other sections of the country that may provide wider choices. Men's colleges, unlike the women's colleges, have been reluctant to hire women; even coeducational institutions have kept professional women as a small minority in their faculties, except in teacher's and junior colleges. On the whole, opportunities are greater for men than women.⁷²

When comparisons were made by Newcomer of the field of concentration of women scholars with those of women students who graduated in 1956, she finds that long-term trends in student choices and professional opportunities, rather than changing student interests, determine major differences. About 50 percent of the scholars obtained their A.B. degree before 1930. The figures for recent graduates, observes Newcomer, reflect a decline over the past fifty years in the proportion of women specializing in science, with a large proportion of recent graduates showing more of an

⁷²Ibid., p. 192.

interest in the humanities and social sciences than the physical and biological sciences.⁷³

More than two-thirds of the women held positions on university and college faculties, cites Newcomer, with approximately one-third of the group teaching in women's colleges and two-thirds in coeducational institutions. Further examination of these two types of institutions shows that women colleges have produced a little more than twice the number of women scholars as reflected from their proportion of enrollments. With about 16 percent of all students enrolled, women's colleges accounted for 34 percent of all women scholars. After excluding Catholic women's colleges and public women's colleges from the figures, Newcomer observes that the remaining women's colleges account for 25 percent of the scholars with 8 percent of the enrollment. By tabulating the eight women's liberal arts colleges separately, Newcomer discusses that these colleges, as a group, accounted for 17 percent of the scholars with 2 percent enrollment of the women's scholars. She concludes that the influence of individual faculty members and the presence of large numbers of women scholars on the faculties of the women's colleges are important factors in encouraging scholarship. She explains that:

⁷³Ibid.

Not only are women faculty more likely to have faith in the intellectual capacity of women students and encourage them to go on with graduate work; they also serve as "models" for their students. They are living evidence that scholarship is not a masculine monopoly.⁷⁴

Despite the fact that women's colleges produced more than twice the number of scholars that their enrollment accounted for, figures for coeducational institutions were even more striking. When Newcomer tabulated the data for women's scholars who graduate from three liberal arts colleges--Swarthmore, Carleton, and Oberlin--she found that Oberlin produced three times the number that its enrollment accounted for, Carleton produced six times its quota, and Swarthmore eighteen times its quota.⁷⁵

Pressey reports the major findings of a study of the women active in scientific work. Investigating the 687 women included in the 1927 edition of "American Men of Science," Pressey concludes that 503 or 73 percent of the women scientists are produced in the north atlantic and north central states. In terms of gross numbers, New York and Massachusetts are the most productive states, but in proportion to population, New Hampshire, Vermont and Rhode Island are the most

⁷⁴Ibid., p. 198.

⁷⁵Ibid., p. 200.

productive states. The study also indicates that the average age of this group is forty-two, and most of the women are single; that is, only 72 of the 687 or 10 percent are married. The greater proportion attended an endowed women's college of the East, and usually received a B.A. degree. Moreover, the typical advanced degree, the Ph.D., is also obtained over half the time in an endowed institution. In the majority of cases, biological science is their major interest, and teaching their major profession. Of the 687 women, 434 are faculty members, 294 with the rank of assistant professor or higher.⁷⁶

Present Trends in the Equality of
Professional Opportunities for
Faculty Women in the
1960s and 1970s

Employment Opportunities for
Faculty Women Members

Increasingly prominent in the literature concerning employment of women in faculty positions in institutions of higher education is evidence pointing to the existence of substantial degree of discrimination. Problems of differential treatment begin earlier, but are evident when women enter the professional world. Studies indicate that a number of factors operate

⁷⁶Luella Cole Pressey, "The Women Whose Names Appear in 'American Men of Science' for 1927," School and Society XXIX (January 19, 1929):96-100.

jointly to produce a propensity toward disproportionate treatment of women at the time of their initial employment: the recruitment process, differential treatment in appointing women to faculty positions, sex discrimination in terms of anti-nepotism policies, in-bred hiring practices, and restrictions on part-time faculty.

Recruitment Process

There is strong evidence that in many institutions of higher education recruitment procedures are, in practice although not in stated policy, more favorable to men than they are to women. For example, Crim writes that women are not only less likely to obtain an appointment to a faculty position, but they are also less likely to learn about job openings.⁷⁷ Further, the old boy's method of recruiting and hiring is an "unwritten but functionally effective 'affirmative action' plan for white males," asserts Bernice Sandler.⁷⁸ In his study, Marcus reports that most successful recruiting is still done by personal inquiries, referrals, phone calls, letters, and recruitment at national conferences. After interviewing department heads in the College of Arts and

⁷⁷Roger Douglas Crim, "Expressed Attitudes of Faculty Men and Women Toward Faculty Women in Higher Education in New Hampshire," Ph.D. dissertation, The University of Mississippi, 1978, p. 11.

⁷⁸Ibid.

Science at the University of Massachusetts, Marcus concludes that the recruitment approach perceived to be the most effective by department heads and most trusted by faculty members is the network system. During 1974-75, Marcus continues, a study of recruitment efforts revealed that of 94 finalists for 28 faculty positions, approximately 39 were females. Those finalists who responded to public advertisements represented only 30.9 percent, while the remainder used the network system.⁷⁹

A number of reports have pointed out that such methods are breaking down and proposed solutions have been varied and numerous. For example, The Carnegie Commission report points out that, under the impact of HEW pressure and as a result of the activities of the numerous committees on the status of women, along with the fact that some faculty members and search committees have made special efforts to broaden recruitment efforts, contributions have been made toward reducing the prevailing practice of using "Cozy" methods to recruit and hire.⁸⁰ Strommer suggests that the informal channels of information created by the administrative structure should be duplicated by women. Since information passed

⁷⁹ On Campus With Women (Washington, D.C.: Association of American Colleges, 1975).

⁸⁰ The Carnegie Commission on Higher Education, Opportunities for Women in Higher Education (New York: McGraw-Hill Book Company, 1973), pp. 119-120.

at poker parties and during five o'clock happy hours excludes women, explains Strommer, women must create their own network of information and associates.⁸¹ As chairperson of the American Psychological Association's Task Force on the Status of Women in Psychology, Astin suggests the development of rosters to facilitate the recruiting efforts of colleagues by providing them with a large pool of potential faculty members. "There is a need for more programmatic efforts to increase the participation of women in professional activities," propose Astin and Bayer, "and also a need to develop a workable system to assist in the identification of women talent."⁸²

Differential Treatment in Appointing Women to Faculty Positions

In an effort to determine specific factors that significantly affected the employment selection of women candidates for faculty positions in academe, Simpson, with a questionnaire designed to reveal discriminatory employment choices and unfavorable attitudes toward women, sampled deans, department chairpersons and total

⁸¹Diane W. Strommer, "Whither Thou Goest: Feminism and the Education of Women," Journal of NAWDAC 39 (Winter 1976):85.

⁸²Helen S. Astin, "Sex Discrimination in Academe," Educational Record 53 (Spring 1972):101-118.

faculty in selected academic fields at six Pennsylvania institutions. He provided them with pairs of resumes with descriptive material held constant. His findings indicate that employing agents exhibited discriminatory attitudes toward women in their significantly more frequent choice and higher preference ratings of men over women even though both were equally qualified. The superior woman, however, was selected over the male candidate.⁸³

A similar study was conducted by Fidell. Questionnaires were sent to psychology departments of 228 colleges and universities. Each questionnaire contained ten paragraphs, each of which described a fabricated candidate to be evaluated as if to be hired. The candidates were distinguished by different balances of nine factors that seemed important in evaluations. Half the sample was told that the candidates were all women, and half was told that they were all men. Responses indicated that sex discrimination on hiring decisions was significant, as men obtained more of the higher

⁸³Lawrence A. Simpson, "A Study of Employing Agents' Attitudes Toward Academic Women in Higher Education," Ph.D. dissertation, Pennsylvania State University, 1968.

positions, all the full professorships, and more of those positions leading to tenure than did women.⁸⁴

Discriminatory hiring practices are discussed by Frazier who writes of an experiment conducted in 1970 in which eight paragraphs giving the professional accomplishments of a young psychologist were sent to department chairmen all over the country. The forms were divided according to sex. Results showed that the departments rated the men more desirable than the women applicants in six of the eight instances.⁸⁵ Such findings are consistent with another study using Woodrow Wilson Fellows who had become college teachers which found that "the men had received three times as many initial job offers as had the women."⁸⁶ Frazier points out that:

Other researchers who have recently investigated discrimination in the hiring of male and female professors summarize the situation: "When all variables were equal except sex, the male candidate was typically chosen for employment."⁸⁷

⁸⁴L. S. Fidell, "Empirical Verification of Sex Discrimination in Hiring Practices in Psychology," American Psychologist 25 (1970):1094-1098.

⁸⁵Nancy Frazier and Myra Sudker, Sexism in School and Society (New York: Harper and Row, 1973), p. 160.

⁸⁶*Ibid.*, p. 161.

⁸⁷*Ibid.*

Anti-Nepotism Regulations

Another source of discrimination in faculty employment of women is anti-nepotism regulations, explicitly stated or not, which forbid employing relatives in comparable positions at the same institutions. Originally passed to prevent pressure to hire incompetents with influential connections, these regulations are now used almost exclusively for the sole purpose of restricting women.⁸⁸ Graham, for example, reports that at one prestigious university, although 20 percent of the wives of junior faculty members have Ph.D.'s, none is a member of the faculty.⁸⁹

An early comprehensive study on the subject of anti-nepotism was conducted by the American Association of University Women in 1959-1960. The sample included three hundred sixty-three public and private institutions. Questioning the institutions about their personnel policies generally and asking specific questions about anti-nepotism regulations, the researchers obtained an overall response rate of 79 percent. Those institutions replying that they had anti-nepotism regulations represented 26.3 percent, while 18.2 percent

⁸⁸ Heather Sigworth, "The Legal Status of Anti-Nepotism Regulations," AAUP Bulletin 58 (March 1972): 31-34.

⁸⁹ Patricia A. Graham, "Women in Academe," Science 169 (September 25, 1970):1289.

replied that they had no restrictive regulations, but do have restrictive policies. Institutions indicating having no anti-nepotism regulations represented 55.4 percent.⁹⁰ Commenting on the same study, Shaffer and Shaffer maintain that the study not only reveals that about half of all educational institutions and over two-thirds of all large public colleges and universities have regulations serving as barriers to the employment of more than one family member on the same faculty, but also, when schools were ordered by size, more liberal hiring policies were found among institutions with smaller enrollments than larger enrollment institutions. Also, no restrictions on hiring were more likely to be found in private universities than public ones.⁹¹

Other early studies report similar findings. In a study of the professional characteristics of women Ph.D.'s, Simon et al. document that of the married women with Ph.D.'s, 15 percent believed that their careers had been hurt by anti-nepotism regulations. Although they did not believe that anti-nepotism regulations had been

⁹⁰Rita J. Simon, Shirley M. Clark, and Larry Tift, "Of Nepotism, Marriage and the Pursuit of an Academic Career," Sociology of Education 39 (1966):344.

⁹¹Harry G. Shaffer and Juliet P. Shaffer, "Job Discrimination Against Faculty Wives: Restrictive Employment Practices in Colleges and Universities," Journal of Higher Education 37 (January 1961):10-15.

barriers to their entry into the academic market, but barriers to their career development.⁹² In another early survey, after selecting a representative sample of 95 and surveying 285 public and private institutions, Dolan and Davis found that over half of the institutions did not have anti-nepotism rules, and that public schools were more closed than private ones.⁹³

Discussing the legal issues raised by the enforcement of anti-nepotism policies in educational institutions, Sigworth notes that for a few years Executive Order 11246, as amended by Executive Order 11375, was the only federal legal inhibition against discrimination in female employment at higher educational institutions. However, in some states equal employment opportunity provisions do exist specifically to challenge anti-nepotism regulations. For example, the Colorado Civil Rights Commission Sex Discrimination Guidelines prohibit the exclusion of qualified women in educational institutions because of the restrictions on the employment of relatives. Also, the Massachusetts Civil Rights Commission interprets its state law as prohibiting discriminatory application of restrictive policies.

⁹² Simon, op. cit., p. 344.

⁹³ Eleanor Dolan and Margaret P. Davis, "Anti-Nepotism Rules in Colleges and Universities: Their Effect on the Faculty Employment of Women," Educational Record 41 (October 1969):285-291.

The new constitution of Illinois and the recent amendment to the Indiana Civil Rights Act provide similar prohibitive provisions.⁹⁴

Alice Rossi announces that almost unanimous support from professional educational organizations for the removal of anti-nepotism regulations had emerged since 1971 when American Association of University Professors (AAUP) adopted a statement demanding repeal of such policies based on the grounds that they tend to serve as barriers to the professional opportunities of academic women. However, Rossi states that more work is needed to make this official position a reality. A recent survey conducted by the national office under the sponsorship of Committee W reveals that of the 378 responses received from AAUP chapter officers, 52 indicated that their institutions restricted the employment of two family members at the same institutions; 52 chapter officers reported restricted employment against simultaneous service in the same department, and 43 reported no written policies. Rossi concludes:

Thus anti-nepotism policies and practices remain a problem, perhaps at a more subtle level than in the past, in about 38 percent of the institutions responding to our inquiry.⁹⁵

⁹⁴ Sigworth, op. cit., p. 113.

⁹⁵ Alice Rossi, "Report of Committee W," AAUP Bulletin 59 (March 1973):173.

To some extent, some institutions have opted to end nepotism policies because of the differential impact on faculty wives. Leppaluato's findings show that even in the early seventies Stanford, Oberlin, and the Universities of Maine, Minnesota, and Michigan either had revised or abolished nepotism rules to allow husbands and wives to work in the same department.⁹⁶

A recent study designed to test whether or not anti-nepotism policies still persisted in the attitudes of college and university faculty, Pingree et al. surveyed the chairpersons of departments of psychology and sociology concerning their attitudes toward hiring a husband and wife in their department. Responses indicated 37 percent chairpersons opposed, 25 percent were neutral, and 38 percent supported the idea. The researchers conclude that, "Chairpersons . . . made many comments that indicate their belief systems continue to operate as a barrier to hiring couples desiring employment in the same academic department."⁹⁷

⁹⁶ Jean R. Leppaluato, "Attitude Change and Sex Discrimination: The Crunch Hypothesis," a paper presented before the Western Psychological Association, 1972, pp. 1-8.

⁹⁷ Susan Pingree, Mitilda Butler, William Paisley, and Robert Hawkins, "Anti-Nepotism's Ghost: Attitudes of Administrators Toward Hiring Professional Couples," Psychology of Women Quarterly 3 (Fall 1978):22-29.

No Inbred Hiring Practices

The policy of no inbred hiring, like the nepotism regulation, contributes to the deprivation of equal employment opportunities for women in institutions of higher learning. This policy by which departments, colleges and universities refuse to advance their graduates to positions on the faculty has as its usual rationale the belief that students tend to be indoctrinated with ideology and approaches of senior faculty members. Faculty drawn from the ranks are likely to be influenced by such indoctrination.⁹⁸

Scott proposes that faculty wives are disadvantaged by such policies. For example, if they attend graduate school where their husbands are employed as faculty members, Scott points out, once they obtain their degree, they are confronted with the fact that the university will not hire them. Disputing the usual accepted rationale for such policies and practices, Scott asserts that:

The "no-inbred-hiring" policy was established and widely accepted in an era of academic life very different from today's. Universities, faculties, and student bodies were smaller; there was much less movement from campus to campus, much less variety in subject, discipline, approach. Today's university, however, needs no such discriminatory restrictions Any policy

⁹⁸ Opportunities for Women in Higher Education, op. cit., p. 110.

based on exclusion betrays the university's principles and restricts its chances as well as those of any person, especially a woman seeking a job.⁹⁹

Restrictions on Part-Time Faculty

It has been pointed out in the literature that the tendency to hire women in non-ladder and non-tenure positions represents still another type of discrimination in employing faculty women. One of the difficulties in evaluating the claim of discrimination, however, is the fact that part-timers as a group are discriminated against.¹⁰⁰ However, the Carnegie Commission suggests that, although the practice may apply to both sexes, women are more likely to be affected because family responsibilities frequently make full-time employment difficult.¹⁰¹ Alice Rossi writes that part-time faculty positions have expanded over the last twenty-five years because of increasing demand for such services. In the early 1960s, 44 percent of all the teaching and professional personnel in higher education

⁹⁹Ann Scott, "The Half-Eaten Apple," Reporter, May 14, 1970, p. 7.

¹⁰⁰Barbara H. Tuckman and Howard P. Tuckman, "Part-Timers, Sex Discrimination and Career Choice at Two-Year Institutions: Further Findings from the AAUP Survey," Academe-Bulletin of the AAUP 66 (March 1980): 71.

¹⁰¹Opportunities for Women in Higher Education, op. cit., p. 110.

were full-time faculty, but 37 percent were part-time faculty. Rossi explains that women are highly represented among the part-time faculty, and they provide "an expendable labor supply for colleges and universities to add or drop from their staffs in response to variations in the size of the study body and bugetary appropriations."¹⁰²

Regardless of their training and aspirations, women, too often, have been marginally placed in teaching and research positions and function as para-professionals.¹⁰³ In most institutions, part-time faculty members are not privileged to vote in faculty meetings, and are not eligible for the full range of faculty benefits.¹⁰⁴ Further, the American Historical Association's study revealed that in their survey 77 percent of all men Ph.D.'s had been hired initially as assistant professors, while only 47 percent of the women Ph.D.'s were hired at that rank.¹⁰⁵

¹⁰² Alice Rossi, "Discrimination and Demography Restrict Opportunities for Academic Women," College and University Business, February 1970, p. 74.

¹⁰³ Sheila Tobias and Margaret Rumbarger, "Full-Status Part-Time Faculty," in W. Todd Furniss and Patricia Alberg Graham, eds., Women in Higher Education (Washington, D.C.: American Council on Education, 1974).

¹⁰⁴ Ibid.

¹⁰⁵ Ibid.

Over the past decade, however, increased interest in part-time positions has occurred with a somewhat different focus accompanied by efforts to change institutional policies. In their review of the literature, Drepenbrock, Halfert and Vandergruff found that the 1975 Bureau of Labor Statistics Report indicates that approximately 34 percent of all women workers hold part-time jobs.¹⁰⁶ Tuckman and Tuckman examine the question of whether discrimination by sex exists among part-time faculty at two-year institutions, and find what appears to be differences in salaries and employment conditions. This sex differential particularly affects women who are employed part time but would prefer to be employed in a full-time academic position.¹⁰⁷

The theme of the role of part-time positions with its concomitant employment flexibility is expressed in a number of reports. For example, Drepenbrock, Halfert and Vandergruff suggest that several factors contribute to the increase of interest in part-time faculty employment in academe, including a contracting academic job market, affirmative action requirements to increase

¹⁰⁶ Elaine C. Drepenbrock, Karen Halfert and Judith C. Vandergruff Montgomery County Community College Survey Conducted by Montgomery County Commission for Women, U.S., Educational Resources Information Center, ERIC Document ED 152 342, 1976.

¹⁰⁷ Tuckman and Tuckman, op. cit., p. 71.

opportunities for women, financial stringency resulting in tight budgets for the institutions, and the fact that part-time employment emerges as an attractive alternative to faculty layoffs.¹⁰⁸ In addition, changing attitudes about family roles is another factor operating to generate more demands for the kind of employment flexibility that part-time employment offers.¹⁰⁹ Nancy Gray suggests a tenure system for part-time faculty, and urges the same standards and benefits to be made available for part-time faculty as are now available for full-time faculty. More and more institutions are finding ways to tailor part-time policies to fit their specific needs, while broadening their employment options to benefit both sexes.¹¹⁰

Advancement Opportunities for Women Faculty Members

Problems of Differential Treatment in the Academic Reward System

Another barrier experienced by women faculty members is found in the academic reward system. According to a recent study of the status of women in six hundred United States colleges and universities

¹⁰⁸ Drepenbrock et al., op. cit.

¹⁰⁹ Ibid.

¹¹⁰ Nancy Gray, "Report of Committee W, 1976-77," AAUP Bulletin 63 (August 1977):443.

conducted by the American Association of University Women, female faculty members experience more severe restrictions than their male counterparts. The report points out that:

She is more likely to be hired at a lower rank, to remain in that rank longer, and to be paid a lower salary. She is less likely to be chosen as a chairperson or dean, or to be asked to serve on prestigious committees, or invited to participate in high level decision-making.¹¹¹

Other studies provide information on the kinds of academic rewards women can expect as faculty members in higher educational institutions. Centra investigates how the experiences of women recipients of the doctorate differ from those of men with similar educational background. On the basis of his research, which analyzed responses from 3,658 men and women matched according to their fields, institutions attended and year of graduation--that is, either 1950, 1960, or 1968--he concludes that women have not reaped the rewards enjoyed by their male counterparts.¹¹² Even when women are statistically matched with men on the variables that determine rewards, reports Schlossberg, they are still apt to fall

¹¹¹Margaret Moses Young, "Sex Discrimination in Higher Education," The Civil Rights Review, July/August 1978, pp. 41-42.

¹¹²John A. Centra, "Women with Doctorates," Change, February 1975, pp. 49 and 61.

below men in rank and salary.¹¹³ In a study of women doctorates, that revealed their current situations regarding academic rewards, La Sort finds that 40 percent cites salary discrimination and 32 percent charges discrimination in tenure and promotion.¹¹⁴ In their study, Weidman and Weidman confirm that rank and salary differentials favor men even when highest degrees and productivity are controlled.¹¹⁵ Astin and Bayer state that the academic reward system is established by men. In order for faculty women to obtain adequate compensation, they must accept and exhibit men's criteria for such rewards. This means that they must respect administrative research and publications over teaching.¹¹⁶

The literature reveals numerous factors in discussions of the academic reward system. This study

¹¹³ Nancy K. Schlossberg, "The Right to be Wrong is Gone: Women in Academe," Educational Record LV (February 1974):258.

¹¹⁴ Michael A. La Sort, "Academic Women's Salaries: Equal Pay for Equal Work?," Journal of Higher Education 42 (April 1971):266.

¹¹⁵ Carla Sue Weidman and Jack C. Weidman, "The Woman Professor of Education: Social and Occupational Characteristics," a paper presented at the annual meeting of the American Research Association, Washington, D.C., April 1, 1975, p. 1.

¹¹⁶ Helen S. Astin and Alan E. Bayer, "Sex Discrimination in Academe," Educational Record 53 (Spring 1972):101-118.

will be restricted to five, including: rank, promotion, criteria for promotion, committee appointment, and salary.

Rank

A major area in which educational institutions have been accused by investigators of impeding full development of faculty women's talents is in differential academic ranking. The literature indicates that women are overly concentrated in certain ranks and correspondingly less adequately represented in others. Graham notes that "the most single observation about women in the academic world is that their numbers decrease dramatically as the importance of the post increases."¹¹⁷ Sexton writes that on a national level women represent 32 percent of instructors, 19 percent of assistant professors, 15 percent of associate professors and only 8 percent of full professors. Sexton finds a similar trend at the seven sisters colleges where women are 82 percent of the nonprofessional teaching staff, 64 percent assistant professors, 54 percent associate professors and 22 percent full professors.¹¹⁸

¹¹⁷Patricia Alberg Graham, "Status Transitions of Women Students, Faculty and Administrators," in Alice Rossi and Ann Calderwood, eds., Academic Women on the Move (New York: Russell Sage Foundation, 1973), p. 163.

¹¹⁸Patricia Sexton, Women in Education (Indiana: The Phi Delta Kappa Educational Foundation, 1976), p. 121.

Other reports indicate similar findings.

Centra's study claims that proportionately more women than men hold lower academic ranks of instructors and assistant professors while more men are full professors and heads of departments.¹¹⁹ In another detailed study based on responses to the American Association of University Professors (AAUP) survey, Astin and Hirsch find that the percentage of women among assistant professors is, without exception, much higher than the proportion of women full professors, and the proportion of women associate professors is also higher, although by a smaller margin.¹²⁰

Evidence indicates that, over the years, women have lost status in the professional ranks while they have gained in the lower ranks. For example, Crim states that women represented 9.9 percent of all professors in 1959-60 as compared to 8.6 percent in 1971-72. Women associate professors have declined by 2.9 percent and assistant professors by one percent. Instructors, however, have made significant gains.¹²¹ In their review of current data for the State of New York and the nation as a whole for the purpose of assessing women's

¹¹⁹Centra, op. cit., p. 49.

¹²⁰Astin and Hirsch, op. cit., p. 124.

¹²¹Crim, op. cit., p. 15.

status in higher education, The University of the State of New York and The State Department of New York document that nationally the percent of women as professors fell from 9.9 percent in 1959-60 to 9.4 percent in 1974-75 with the largest increase at the instructor level. The report shows that the statistics for New York follow the same trend.¹²²

A number of investigators have reported on differential variation according to individual institutions of higher learning. Frazier points out that at Connecticut College, at each academic rank, women were more likely than men to have the Ph.D. when appointed, yet they had to wait longer than men before they were permitted to the next rank.¹²³ Examining the major job categories at the State University of New York at Buffalo, Ann Scott claims that women are under-utilized as they move up through the educational job categories. They represent 14 percent of the faculty and only 5 percent of the full professors. She reports that the number of women does not equal the number of men in any of the seven faculties, and in the faculty of Arts and Letters, which includes many of the disciplines in which

¹²²Women in Higher Education in New York State: Students, Faculty and Administrators, an information paper, The University of the State of New York (New York: The State Department, 1976), p. 120.

¹²³Frazier and Sudker, op. cit., p. 163.

faculty women tend to concentrate, the patterns are not any more favorable to women than anywhere else. Total percentage patterns are the same as the University as a whole; that is, 86 percent men to 14 percent women. Faculties of 90 percent or over male are to be found in art, classics, English and music.¹²⁴ Reporting on the conditions at the University of Chicago in 1969, Husbands documents that women were 2.2 percent of full professors and 6 percent of associate professors, yet, they were 27 percent of the lecturers. Twenty-four percent of research associates and 57 percent of the undergraduate lecturers.¹²⁵ Examining sex discrimination in fifteen departments in the College of Arts and Sciences at the University of Maryland, Sandler reports that, of these departments, nine had no women full professors, four had one, one department had two, and one, three. Sandler states, also, that as one moves up the academic ladder, the proportion of women sharply drops, for women do not move up as rapidly as men, and they are generally excluded from the power structure and

¹²⁴Scott, op. cit., p. 5.

¹²⁵Sandra Archer Husbands, "Women's Place in Higher Education?," School Review, February 1960, p. 267.

tend to receive lower compensation than men in comparable ranks.¹²⁶

The sex differential varies according to types of institutions. Weidman and Weidman write that, when the highest degree is held constant, women in both colleges and universities are less likely than men to hold the rank of professor, and that "this sex differential is much more pronounced for universities than it is for colleges."¹²⁷ Sexton claims that academic women constitute between a fifth and a quarter of teaching staff; they are underrepresented in the faculties of the major universities and high prestige colleges and overrepresented in small colleges and community colleges.¹²⁸ Wasserman finds only 6.6 percent of women faculty members at the financially best endowed American universities.¹²⁹ In her review of the literature, Benoit states that the National Educational Association's 1966 study reveals that faculty women working in universities, excluding colleges, did not hold top academic ranks of

¹²⁶Bernice Sandler, "Sex Discrimination at the University of Maryland," a report prepared for the Women's Equity Action League, Fall 1969.

¹²⁷Weidman and Weidman, op. cit., p. 6.

¹²⁸Sexton, op. cit., p. 121.

¹²⁹Elga Wasserman, Arie Y. Lewin, and Linda H. Bleiweis, eds., Women in Academia: Evolving Policies Toward Equal Opportunities (New York: Praeger, 1975), pp. 1-2.

associate and full professors as often as did men. However, Benoit points out, in a contrasting study examining the academic ranks of a sample drawn from the National Register of Scientists of men and women natural and social scientists shows no significant sex differences in academic ranks.¹³⁰ Astin and Hirsch find the percentage of women among full professors to be smallest in the most prestigious universities and tends to rise with the declining prestige of the university. Moreover, the percentage is drastically smaller in private than in public universities and colleges.¹³¹

The sex differential varies somewhat according to academic discipline and marital status. According to Graham, women achieve the status of full professor at a slower rate than men with the average lag varying from two to five years in the biosciences and up to ten years in the social sciences.¹³² In the field of education, Weidman and Weidman report that holding degree constant, while both men and women professors of education are more likely to have a higher rank than their counterparts in universities, women professors of education in

¹³⁰Sallye Starks Benoit, "Job Satisfaction Among Faculty Women in Higher Education in the State Universities of Louisiana," Ph.D. dissertation, Louisiana State University, 1976, p. 11.

¹³¹Astin and Hirsch, op. cit., p. 119.

¹³²Graham, "Women in Academe," p. 1285.

colleges holding a doctorate other than the Ph.D. are slightly more likely to hold the rank of professor than men, and even than women Ph.D.'s who are also teaching in colleges.¹³³

Numerous reports have investigated the relationship between marital status and academic rank. Graham finds in her study a marital status difference. She comments:

Considering data on women for all fields combined, the single women lead the married ones by five to ten years. At any given time, 10 to 20 percent more of the single than married women have achieved full professor status.¹³⁴

Simon, Clark and Tift write that unmarried women are more likely to be represented in the associate and full professor ranks than are married women who are more likely to be represented in the lower ranks of research associates, lecturers and instructors.¹³⁵

Promotion

Disproportionate treatment of faculty women can be documented once they are hired. As pointed out in Opportunities for Women in Higher Education, whether women will have an equal opportunity to obtain merit

¹³³Weidman and Weidman, op. cit., p. 6.

¹³⁴Graham, op. cit., p. 1285.

¹³⁵Simon, Clark and Tift, op. cit., p. 353.

increases and promotions is the big question after she obtains a position.¹³⁶ Schlossberg maintains that academic women take about twice as long as men to move up the academic ladder.¹³⁷ In an earlier report, Lindsey Harmon discusses one study that showed that 90 percent of the men with Ph.D.'s and at least twenty years of academic experience had become full professors, and only half of the women with the same qualifications had earned the rank of full professor.¹³⁸

Differential utilization of faculty women is explained, to some extent, by Wasserman who argues that in the academic job market, men have had to compete mostly with other males rather than with the total pool of doctorate recipients. Wasserman suggests that:

This may explain why efforts to eliminate inequities and to encourage hiring and promotion without regard to sex or race are now being characterized as "discrimination" against white males. Even if a woman is hired to a faculty position, it is very likely that she will encounter a struggle when it comes to promotion.¹³⁹

¹³⁶Opportunities for Women in Higher Education, op. cit., p. 121.

¹³⁷Schlossberg, op. cit., p. 258.

¹³⁸Lindsey Harmon, "Careers of Ph.D.'s Academic Versus NonAcademic: A Second Report on Follow-Up of Doctorate Cohorts 1935-1960," publication 1577 (Washington, D.C.: National Academy of Science, 1968).

¹³⁹Wasserman, op. cit., p. 7.

The differential varies according to field. Benoit discusses a 1968 study of science doctorates which found that the small proportion of women in the natural sciences tended to obtain promotions equal to their male counterparts. Yet, a greater proportion of women in the social sciences were found to obtain promotions less frequently than men, even though a high concentration of women has been in the field over the years.¹⁴⁰ Frazier states that in sociology estimations are that 90 percent of the men with Ph.D.'s and twenty years of experience have obtained the rank of full professor, whereas women with identical qualifications barely have obtained that rank.¹⁴¹ Using data from the University of California statewide and from the Berkeley campus, Astin and Hirsch document that promotion rates for males and females on a statewide basis were 20.1 percent of the men, compared with 9.3 percent of the women who were assistant professors in October 1976, and who were promoted to associate professor in July 1977. Also, 14.4 percent of the men and 9.8 percent of the women who were associate professors in October 1976 were promoted to full professors.¹⁴² The researchers

¹⁴⁰Benoit, op. cit., pp. 12-13.

¹⁴¹Frazier, op. cit., p. 163.

¹⁴²Astin and Hirsch, op. cit., pp. 128-129.

indicate that more encouraging are the Berkeley data relating to promotions effective July 1975 and July 1976 combined, which showed that 15.5 percent of the men and 10.1 percent of the women assistant professors were promoted to associate professors, while, among associate professors, 14.6 percent of men and 14.0 percent of women associate professors were promoted to full professors.¹⁴³

A number of sources have suggested that often-times nebulous and somewhat subjective factors determine promotion and advancement. Hawkins claims that, other than publication, no objective criteria exist for evaluating a faculty member for promotion. It is a matter of such subjective criteria as being compatible, and having acceptable lifestyles and personal relations with those of the tenured members of the department. Hawkins sees women as being disadvantaged in this subjective area.¹⁴⁴ A U.S. district judge in New Hampshire upheld his earlier ruling that Christine Sweeney was the object of sex bias by Keene State College when it failed to promote her to full professor in 1974. Judge Hugh H. Brown, in upholding his earlier ruling, said that:

¹⁴³ Ibid.

¹⁴⁴ Ruth R. Hawkins, "The Odds Against Women," Change, November/December 1969, p. 36.

Mrs. Sweeney had proved she was qualified for promotion and that male professors with "no greater qualifications" had been promoted ahead of her But for her sex, she would have been promoted in academic year 1974-75.¹⁴⁵

Scott maintains that performance and merit are only two of the numerous factors that are used to determine advancement in most hierarchies. In comparison to other factors used in promotion deliberations, performance and merit may have little importance. She proposes that women entering the world of higher education must quickly realize "that professional advancement is something that must be sought, seized, and retained."¹⁴⁶

Loeb et al. note that:

As the higher education job market constricts still more, as a result of declining college enrollment and budgetary stringency, it is entirely likely that promotion standards will become even higher. Thus, women who are currently being promoted more slowly than are similarly qualified men may as a result face even stiffer standards.¹⁴⁷

Criteria for Promotion

Another alleged cause of the lower rewards for women is that women professionals are, on the average,

¹⁴⁵ Ibid.

¹⁴⁶ Scott, op. cit., p. 34.

¹⁴⁷ James W. Loeb, Marianne Feber and Helen Lowry, "The Effectiveness of Affirmative Action," Journal of Higher Education 49, no. 3 (1978):227.

less productive than men. Therefore, productivity, an important criteria for promotions, must be carefully considered when examining differential utilization of faculty women. Sexton reports on a study of the academic marketplace late in the fifties and concludes that women scholars are not taken seriously. Not only are they discriminated against by college men, but even college women demonstrate prejudice against academic women and what they produce. It was found in one study that, when college women were given sets of articles in various professional fields authored by three males and three females and when the author's names were switched, the college women rated those articles bearing the names of male authors higher than when the same articles bore the names of women authors. As Sexton points out, "Even articles on homemaking and dietetics were rated higher when they bore the name of a male author."¹⁴⁸

A number of investigators find that, as a whole, women scholars are not as productive as men. Weidman and Weidman note that women's productivity level is lower than their male counterparts.¹⁴⁹ Centra's findings

¹⁴⁸ Sexton, op. cit., pp. 126-127.

¹⁴⁹ Weidman and Weidman, op. cit., p. 2.

document the average number of articles published by male scholars as fifteen and nine for women scholars.¹⁵⁰

Other factors examined by researchers are the relationships between scholarly productivity and marital status and childrearing and scholarly productivity.

Controlling for sex, Weidman's findings show that married women with the Ph.D. have a tendency to be more productive than single women, and single women holding the Ed.D. or other doctorate are more productive than their married counterparts.¹⁵¹ Similar findings by Astin reveal that the scholarly productivity of single and married women shows married women to be more productive. Astin points out that:

One cannot conclude from this investigation that the careers of single women are more like those of men than those of married women, nor can one conclude that the lower status of academic women results from marital and family constraints.¹⁵²

Examining the relationship between childbearing and faculty women's scholarly productivity, Hamovitch and Morgenstern find that, although women faculty publish somewhat less than men, no evidence exists to indicate

¹⁵⁰Centra, loc. cit.

¹⁵¹Weidman and Weidman, op. cit., pp. 7-8.

¹⁵²Astin and Hirsch, loc. cit.

that childrearing is related to the number of publications of women faculty members.¹⁵³

Some researchers have attempted to assess the desirability and importance of productivity in the academic world, particularly as it affects students. Astin and Bayer conclude that productivity is an important characteristic in the academic world and is a critical issue in the reward structure.¹⁵⁴ Some evidence has been found that at institutions where faculty publish a great deal and are highly visible in terms of placing emphasis on productivity and research, students are no more likely than students at other institutions of higher learning to indicate that they believe the institution cares about them as individuals.¹⁵⁵ According to Astin and Bayer:

. . . Institutions may be perpetuating an academic reward system that is dysfunctional to students and could well become destructive to society in that it promotes competitiveness, discontent, and withdrawal from the world of intellect and scholarship.¹⁵⁶

¹⁵³William Hamovitch and Richard D. Morgenstern, "Children are the Productivity of Academic Women," Journal of Higher Education XLVIII (November/December 1977):633.

¹⁵⁴Astin and Bayer, op. cit., pp. 101-118.

¹⁵⁵Ibid.

¹⁵⁶Ibid.

Focusing upon institutional factors that affect scholarly productivity, Astin argues that the important correlates of scholarly productivity for both faculty members of both sexes are quality of graduate training institutions, field of specialization, and type of institution of current employment. Important predictors for published articles and published books are area of specialization. Faculty women in the biological and physical sciences publish more articles, whereas faculty women in humanities publish more books.¹⁵⁷

Teaching Effectiveness

The literature reveals a number of studies indicating that, as a whole, faculty women tend to be more interested in teaching than in research. Eckert and Slechlen report in their findings sex differential according to duties preferred. Faculty women give more of their time to teaching and to services to student groups, and faculty men devote more time to research activities, committee work and off-campus projects. For example, according to the study, 63 percent of the women, as compared with 36 percent of the men, report no time spent on research or scholarly work. The study also demonstrates that more women want to devote still

¹⁵⁷Astin and Hirsch, loc. cit.

more time to teaching and to counseling students.¹⁵⁸ Jessie Bernard's study found that faculty women preferred to be teachers and were more concerned with students, while faculty men preferred professional peers and were less responsive to students.¹⁵⁹ Churgin notes that "when queried, women seem more to favor the personal satisfaction they get from their academic relationships with students, whereas men are more inclined to prefer the opportunity for research."¹⁶⁰

Salaries

Women are not only underrepresented on university and college faculties, but of those employed, their salaries are, on the average, lower than salaries of male faculty members. LaSort believes the question of equitable salary to be more crucial than that of tenure and promotion.¹⁶¹ Along the same line, Wasserman et al. support the contention that the most obvious and

¹⁵⁸ Ruth E. Eckert and John E. Slechlen, "Academic Women," in Athena Theodore, ed., The Professional Women: Trends and Prospects (Cambridge: Schenkmen Publishing Company, 1971), pp. 350-351.

¹⁵⁹ Hawkins, op. cit., p. 34.

¹⁶⁰ Churgin, op. cit., p. 66.

¹⁶¹ LaSort, op. cit., p. 266.

and easily documented type of discrimination is salary differential.¹⁶²

A number of national studies have pointed out differential pay schedules for women and men. One of the most comprehensive studies was conducted by the National Education Association, which showed that women faculty were paid less in the aggregate than men. The researchers, Alan Bayer and Helen Astin, provide data to support the existence of salary differentials in both beginning and later academic positions.¹⁶³ Benoit interprets this study and points out that Bayer and Astin conclude that:

Across all work setting, field, and rank, women received lower salaries than their male colleagues with equivalent work experience; however, these differences were less in the social sciences than in the natural sciences.¹⁶⁴

Of considerable concern to investigators have been the difficulty of proving discrimination even when salary differentials seem apparent and are documented. On the basis of the 1969 Carnegie Commission Survey, Astin and Bayer and Elizabeth Scott have conducted studies using complex analysis of appropriate data to determine and explain salary differences in terms of

¹⁶²Wasserman et al., loc. cit.

¹⁶³Alan and Bayer, op. cit., pp. 101-118.

¹⁶⁴Bernard, op. cit., pp. 13-14.

discrimination, or more objective factors such as the smaller percentage of women faculty who earned the Ph.D. Using a linear regression equation with thirty-two predictor variables, including rank and achievement, Astin and Bayer find that after controlling for all the other variables, average residual difference of \$1,000 existed in favor of men.¹⁶⁵

In her study conducted for the Carnegie Commission, Elizabeth Scott explores sex differences in salaries in the various types of institutions and in the various fields. Her analysis indicates that, for all major groups of fields and types of institutions, evidence of a pervasive pattern of lower salary for women are present that is not explained by the predictor variable.¹⁶⁶ In their study at Stoney Brook, Tanor and Coser argue that women in fields with relatively high proportion of women are more likely to have lower than predicted salaries than women in fields where there is a lower proportion of women, and women of high rank are more likely than women of low rank to have

¹⁶⁵ Alan Bayer and Helen S. Astin, "Sex Differences in Academic Rank and Salary Among Science Doctorates in Teaching," Journal of Human Resources 3 (Spring 1968):191-200.

¹⁶⁶ Opportunities for Women in Higher Education, op. cit., pp. 115-116.

lower than predicted salaries than women in fields where there is a lower proportion of women, and women of high rank are more likely than women of low rank to have lower than expected salaries.¹⁶⁷ In the field of education, an analysis of sex differences in salary among men and women professors of educators reveals clear and consistent differentials unfavorable to women. At all ranks in the field of education, women professors earn less than their male counterparts.¹⁶⁸

Loeb, Ferber and Lowry document that after a number of merit and experience indices are accounted for, approved affirmative action programs have failed to decrease residual salary differences existing between men and women. Recognizing that inflation has reduced the value of the dollar amount in real terms, the researchers argue that the dollar amount is still approximately the same in 1974 and 1969. In their discussion, they conclude that:

With academic rank and department controlled by matching, with departmental salary, experience, and merit differences controlled statistically, salary differences between

¹⁶⁷Judith M. Tanor and Rose L. Coser, "Pockets of 'Poverty' in the Salaries of Academic Women," AAUP Bulletin, March 1978, p. 28.

¹⁶⁸Ibid.

males and females persist at an approximate level of \$100.00 per month on a nine month contract.¹⁶⁹

Tuckman and Tuckman report on salary differences favoring men in two-year institutions. Among the various categories examined, Tuckman notes that the largest difference is observed in the category of women part-time teachers hoping for full-time positions. In that category, women are paid substantially less on an hourly basis than men. For example, the investigator finds that a \$4.00 hourly salary differential is substantial.¹⁷⁰

Greenfield denotes certain barriers that are both impeding efforts to end salary discrimination against underpaid women and keeping the problem within the area of statisticians and away from the courts. Greenfield states:

The courts have conditioned relief for such discrimination upon clear proof that the work of men and women is substantially equal, and the work of any one profession is frequently different than that of his or her colleague. Second, courts have not yet taken advantage of available statistical methods to make meaningful comparisons between similar but unequal positions.¹⁷¹

¹⁶⁹Loeb, Ferber and Lowry, op. cit., p. 225.

¹⁷⁰Tuckman and Tuckman, op. cit., p. 73.

¹⁷¹Ester Greenfield, "From Equal to Equivalent Pay: Salary Discrimination in Academia," Journal of Law and Education 6 (January 1977):41.

Supporting the argument that women with the same qualifications as men receive less pay, Leppaluato examines the HEW investigation at Teachers College at Columbia Univeristy and reports that the findings show the average compensation for both sexes in the three academic ranks as: \$500.00 less for women assistant professors, \$700.00 less for women associate professors and \$1,000.00 less for women full professors. Leppaluato concludes that males with doctorates and twenty years of academic experience will be full professors in 90 percent of the cases, while only half of the women with similar qualifications will be full professors.¹⁷² Also examining rank differences, Frazier reports on one study that found the disparity between women and men in the full professor's rank to be \$1,400.00. She concludes:

It seems that the longer a women remains in higher education, the greater her rank and her professional experience, the more likely she is to experience discrimination.¹⁷³

Centra indicates that women's income from all sources ranges from an average of \$16,400.00 when they have from five to six years of experience to \$21,800.00 when they have twenty-two to twenty-three years of experience. Men's income ranges from \$18,700.00 to \$27,000.00 for

¹⁷²Leppaluato, op. cit., p. 4.

¹⁷³Frazier and Sadker, op. cit., p. 165.

similar length of service.¹⁷⁴ In their investigation, Johnson and Stafford observe that salaries of faculty women start out at slightly less than male faculty members and then decline. The investigators contend that, "over a thirty-five year work life, roughly two-fifths of the wage disadvantage is attributable to discrimination and three-fifths to human capital differences."¹⁷⁵

A salary study, conducted at Southern Methodist University and focusing on two aspects of the internal labor market in universities in determining sex discrimination in different departments in the entrance rates and policies on promotion and salary increases, shows that individual women's salaries are 5 to 50 percent less than the average for comparable men.¹⁷⁶

Several arguments have proposed that male attitudes have been a contributory factor to the problem. According to Moses Young, an American Association of University Women (AAUW) report found that antagonistic attitudes of male decision-makers within

¹⁷⁴Centra, op. cit., p. 49.

¹⁷⁵G. E. Johnson and F. P. Stafford, "The Earnings and Promotion of Women Faculty," American Economic Review 64 (December 1974):888-903.

¹⁷⁶Barbara Reagin and Betty J. Maynard, "Sex Discrimination in Universities: An Approach Through Internal Labor Market Analysis," AAUP Bulletin 60 (March 1974):13-21.

the university community were the most significant barriers for women in higher education. These attitudes are not generally overtly expressed, but come into play when salary and other rewards of the academic system are determined.¹⁷⁷ The question of commitment sometimes comes up during discussions of salary inequities. For example, as Leppauluato contends, the myth that education is wasted on women persists, despite the fact that the evidence clearly demonstrates that the more education a woman obtains, the more likely she is to work. Ninety-one percent of the women with doctorates are employed.¹⁷⁸ Centra further documents that women averaged 9 percent of their time in part-time employment in contrast to 1 percent for men and were unemployed 7.5 percent of the years compared to less than 1 percent for men.¹⁷⁹

Other Contributions of Faculty
Women to the Profession

The literature reveals that in addition to their publishing women serve on important committees and are needed models for their students.

¹⁷⁷ Margaret Moses Young, "Sex Discrimination in Higher Education," The Civil Liberties Review, July/August 1978, pp. 41-42.

¹⁷⁸ Leppauluato, op. cit., p. 4.

¹⁷⁹ Centra, op. cit., p. 49.

Committee Appointments

Two reports attempt to account for the fact that faculty women are not adequately represented on committees that affect their employment and career opportunities. Scott investigates committee appointments at the State University of New York at Buffalo and reports that executive decisions determine many committee appointments, thereby making prejudice against women in authoritarian roles easily avoided. At the University, Scott finds that five women serve on four of the nine faculty standing committees. No woman chairs a committee, and no woman appears on such committees as Economic Status, Educational Planning and Policy, and the SUNY/B Council. Women serve on the Faculty Grievance Committee because they insisted on representation. In fact, the first grievances of the newly formed Faculty Grievance Committee came from a woman faculty member who complained that the committee had no woman represented.¹⁸⁰

In another report, labeled "Survey of Women on Committees at New Jersey Colleges and Universities," it is documented that, overall, women representation on college committees is 23.4 percent, which is proportionately relative to their representation on the New Jersey faculties; that is, 22.5 percent. In some cases,

¹⁸⁰ Scott, op. cit., p. 8.

according to the data, women are underrepresented on personal decision-making committees. The report stresses that women have a tendency to serve less on crucial committees such as those affecting tenure and promotion, and are more likely to be highly represented on such committees as the library and bookstore committee. For example, at University College at Rutgers, although women represent 26.4 percent of the faculty, there are no women represented on the Appointments and Promotions Committee. In the Seton Hall School of Education, women comprise 40 percent of the Library Committee, but only 11.1 percent of the Rank and Tenure Committee.¹⁸¹

Role Models

The paucity of role models points to another contribution that faculty women can make to help alleviate obstacles to women's career development. Among undergraduate and graduate students, role models have been found to be a strong predictor of success. Frazier observes that schools of higher education must concentrate on providing women role models for their

¹⁸¹ New Jersey: The Status of Women in Higher Education, a survey by Committee W of the New Jersey State Conference of the American Association of University Professors, April 1972, pp. 1-31.

students.¹⁸² Tidball finds in her study a highly significant positive correlation between the number of faculty women at institutions and the number of women who complete their programs and obtain their degrees. She states that:

Most colleges and university environments are relatively non-supportive of women faculty and women students. Women faculty are themselves affirming of women students, just as men faculty are of men students, but the small proportion of women faculty in virtually all types of institutions assures that the views of men faculty dominate the institutional climate.¹⁸³

In her work, Strommer makes the claim that the small proportion of women faculty members, particularly in tenured ranks, leaves few people to whom women students can look to for needed guidance and encouragement. She emphasizes the numerous studies that have explored reasons why women drop out of educational programs leading to the doctoral degree in greater percentages than men, and this researcher concludes that women graduate students become discouraged by the few faculty women in academe and drop out. "Lack of role models and discriminatory attitudes," cites Strommer,

¹⁸²Frazier and Sadker, op. cit., p. 168.

¹⁸³Elizabeth Tidball, "On Liberation and Competence," Educational Record, Spring 1976, p. 373.

"are all significant factors."¹⁸⁴ Rossi stresses the need for universities to move away from parochial concerns of immediate status payoffs and the need to share with faculty women in setting goals that will encourage young women in making greater social contributions.¹⁸⁵

There has been a growing trend among educators and researchers to recognize and point out the relationship between role models and students, and the potential impact faculty women have to motivate students. Scott indicates that, in today's college, women do not see enough successful women, or even women treated as equals by their male colleagues. She points out that discussion of role models by Cynthia Epstein reveals that the paucity of role models for women students can result in possible repercussions, and the lack of motivational models in the university has become a matter of grave concern.¹⁸⁶ Describing some of these possible repercussions, Schlossberg contends that bright, achievement-oriented women students may find it to be more difficult to succeed when there are few visible

¹⁸⁴Diane Strommer, "Wither Thou Goest: Feminism and the Education of Women," Journal of NAWDAC 39 (Winter 1976):52.

¹⁸⁵Rossi, op. cit., p. 78.

¹⁸⁶Scott, op. cit., p. 5.

role models.¹⁸⁷ Elizabeth Almquist and Shirley Angrist propose that the importance of role models lies in their explication of a lifestyle that combines career and family. In order to become motivated to the commitment of such an adult lifestyle, students must have some idea of what such a lifestyle entails. Therefore, women faculty members, among other things, can serve as models of this lifestyle.¹⁸⁸ Graham suggests that, in addition to the problem women students have of not having enough visible faculty women occupying positions of importance, women students often experience "internal ambivalences" because of the difficulty in finding models to fit the pattern of being ordinary and still being able to marry, rear children, and handle a responsible career.¹⁸⁹

Use of Full Potential of Women Faculty

Federal Intervention

The review of the literature reveals that, while it is difficult to discern the real areas of discrimination that serve as barriers to utilization of full potential of faculty women, the federal government has

¹⁸⁷Schlossberg, op. cit., p. 260.

¹⁸⁸Elizabeth Almquist and Shirley S. Angrist, "Role Models Influences on College Women's Aspirations," in Athena Theodore, ed., The Professional Woman (Cambridge: Schenkman, 1971).

¹⁸⁹Graham, op. cit., p. 1286.

attempted to initiate checks on employment discrimination. In March 1972, both by statute and executive order, the federal government has intervened on behalf of academic women. Title VII of the Civil Rights Act of 1964 was amended to cover educational institutions. Reasons for the amendment as discussed by the Congressional Committee are presented by Crim who maintains that the Committee concluded that, in the field of education, discrimination against women, is as pervasive as in any other areas of employment. Although women have been invited to participate in the process as students, they have not been given serious consideration as prospective professional employees. Even those who are hired, the Committee observes, have not been elevated to positions equal to those of their male counterparts.¹⁹⁰ The Higher Education Act of 1972 under Title IX states that:

No person in the United States shall, on the basis of sex, be excluded from participation in, benefits of, or be subjected to discrimination under any educational program or activity.¹⁹¹

The Carnegie Council on Policy Studies in Higher Education indicates that, based on their historic record, many colleges and universities are inadequate in meeting

¹⁹⁰Crim, op. cit., pp. 14-15.

¹⁹¹Astin and Hirsch, op. cit., pp. 129-130.

test of providing equal opportunity on the basis of sex. Policies on employment, promotion, and pay show evident discrimination, and reforms had to be generated from outside the university largely through the efforts of the federal government, instead of through efforts of the educational institutions themselves. The Council concludes that, "These institutions have impoverished its own performance by the neglect of large pools of potential academic performance."¹⁹²

Reports reflect mixed conclusions as to the effectiveness of affirmative action. Hornig contends that affirmative action bypasses the underlying problem of attitudes, and serves only as a facilitative tool to equalize opportunities for employment.¹⁹³ In an examination of important factors both impeding efforts to eliminate sex discrimination in academia and those facilitating such efforts, Leppauluato suggests that current attitudes and behavior of women, administrative leaders, as well as governmental agencies are largely responsible for lack of change in present conditions. On the negative side, Leppauluato asserts that sex discrimination is still a socially acceptable prejudice.

¹⁹²Ibid.

¹⁹³Lillie S. Hornig, "Affirmative Action Through Affirmative Attitudes," Women in Academia: Evolving Policies Toward Equal Opportunities (New York: Praeger, 1975), p. 9.

For the most part, women are either unaware of their disadvantages or they simply accept their situation as inevitable. Men, especially those in leadership positions such as academic administrators, may articulate an understanding, but their behaviors belie such understanding. In terms of the progress made by governmental action, Leppauluato points out that one problem has been the formulation of laws that fail to be all inclusive. For example, the 1964 Civil Rights Act, while forbidding sex discrimination in employment, failed to include faculty in educational institutions. Title VI, while forbidding discrimination in federally assisted programs, excluded sex. Professional, executive and administrative employees are excluded in the Equal Pay Act. Only by Executive Order of the President, which forbids discriminatory practices by federal contractors, explains Leppauluato, is sex discrimination checked in higher educational institutions. Women's groups and other faculty and staff members in academe have not been totally satisfied with monitoring efforts on the part of the Department of Health, Education and Welfare, the agency responsible for enforcement in college and university systems. Leppauluato contends that studies and such evidence as produced by such Congressional hearings as the one conducted by Representative Edith Green of Oregon have exploded the myth

that conditions are improving for women. In fact, these reports indicate that academic women's position has been deteriorating. On the positive side, however, Leppauluato sees women as beginning to demand equal opportunities, and investigations by the Department of Health, Education and Welfare have made academic women more aware of inequities in the system by the types of questions generated. Such changes as equal pay for equal jobs and equal opportunity for employment should come as a result of more anti-discrimination policies and programs are implemented and as HEW continues to withhold government contract money from any institution failing to comply with Executive Order 11375 as amended.¹⁹⁴

In conjunction with Title IX and the DHEW regulations, the Women's Educational Equity Act of 1974, which states that "present educational programs frequently limit the full participation of all individuals in American society," is also valuable for promoting strategies of interventions ultimately leading to the maximization of women's employment potential.¹⁹⁵ Young reports that little has changed for women in higher

¹⁹⁴ Leppauluato, op. cit., pp. 1-8.

¹⁹⁵ J. T. Wirttemberg and Charles Y. Nakamara, "Education: Barrier or Book to Changing Occupational Roles of Women?," Journal of Social Issues 32 (1976).

education since the enactment of Title VII amendments. She supports her conclusion with the results of a recent study of the status of women in six hundred U.S. colleges and universities by the American Association of University Women (AAUW), which illustrates that since 1973 no significant gains have been made in the percentage of women holding academic jobs or tenure faculty positions. According to the report, one of the most significant barriers for academic women is the attitudes of male decision-makers within the university. Such attitudes are not usually overtly expressed, the report indicates, but are factors that influence promotion, tenure, or other rewards of the academic system.¹⁹⁶ Inadequate follow-up is a major problem with the current affirmative action program, observe Leob, Ferber and Lowry. These researchers conclude that one solution to the relative ineffectiveness of the current requirements might be increasing government follow-up and monitoring. Affirmative action programs should be redesigned to build in incentives aimed toward results, such as equity in hiring, pay, and rank, rather than procedures.¹⁹⁷

¹⁹⁶Young, op. cit., p. 42.

¹⁹⁷Leob, Ferber and Lowry, op. cit., p. 227.

Abramson accuses the agency of lax enforcement and calls for strong government presence.¹⁹⁸

Recently, the Sloan Commission on Government and Higher Education, a 22-member commission created more than two years ago by Alfred P. Sloan Foundation of New York, for the second time has called for the establishment of a single federal agency to enforce all anti-discrimination laws. The commission argues that major sources of confusion are the diffusion of responsibilities of the seventeen federal laws and executive orders relating to equal opportunity to be enforced, and the federal courts with ultimate jurisdiction. Also, the fact that Congressional legislation has not provided clear standards or power for these agencies. Variation in compliance standards and enforcement procedures and considerable duplication of efforts on all sides result in excessive expenses for higher education and the government. The Commission concludes that, to have a lasting impact on our higher educational institutions, affirmative action must be managed by the people who make the decision, the faculty and the administration. Therefore, the Commission recommends:

¹⁹⁸ Joan Abramson, "Measuring Success, or Whatever Happened to Affirmative Action?," Civil Rights Digest (Winter 1977).

The creation of a single consolidated agency for the enforcement of all equal opportunity laws in higher education, which we call the Council of Equal Opportunity in Higher Education. It would be an independent regulatory agency within the new Department of Education, under the Secretary; it would provide incentives for effective self-regulation; and as much as possible, it would unify standards and consolidate enforcement.¹⁹⁹

These reports have indicated restrictive barriers imposed upon women in the academic world. Other institutional barriers include an overall modus operandus of these institutions believed by a number of investigators to be masculine oriented. Also, investigators consistently pointed out that occupational stratification by sex serves as an institutional barrier.

Masculine-Oriented Institutions

Several arguments provide information as to the kind of treatment women faculty members might receive in institutions believed to be masculine oriented. Dinerman raises the question, "Is there in fact something masculine about higher education?"²⁰⁰ This author states that faculty women face a credibility gap, based on student reactions which are different toward materials

¹⁹⁹Malcolm G. Scully, "Sloan Panel Reiterates Call for Single-Anti-Bias Agency," The Chronicle of Higher Education XX (March 24, 1980):9-11.

²⁰⁰Dinerman, op. cit., p. 256.

presented by a woman. Students see such presentations as less valid, less authoritative, and less convincing as identical material presented by a male. Dinerman points out that, often, women faculty members are restricted to teaching stable subjects--that is, subjects based on long accepted principles rather than controversial or conflicting interpretations. "The problem lies with a student body raised on a cultural conception of the feminine roles which prevents any positive response to a female scholar," concludes Dinerman.²⁰¹

Disproportionate treatment of married women is traced to academic careers favoring married men. For example, Hochschild examines a detailed study by the Carnegie Commission and reports that the academic career is based on the image of the traditional married male and his traditional wife. According to Hochschild, the family is a hidden element in the common description of an ideal academic career, and serves a function for the university. The academic career subcontracts work to the family with men and women having different ties. For men, the chain of experiences that seems to anchor the traditional academic career includes, among other things, building a reputation while still young,

²⁰¹Dinerman, op. cit., p. 256.

hoarding scarce time while minimizing family life by leaving major family responsibilities to their wives. For married women Ph.D.'s, on the other hand, about twenty-eight hours per week are spent by them performing household tasks. At the time that their married counterparts are concerned with making a contribution and building reputations as scholars, women frequently are tied to the home bearing and rearing children.²⁰²

Traditionally Male Fields

Evidence pointing to the existence of occupational stratification by sex has become increasingly prominent in literature concerning the role of academic women. Wirtenberg and Nakamara, for example, contend that the confinement of women to traditional women's occupation has been the goal of higher educational institutions.²⁰³ Yet, even in their own domain women have been losing ground. According to Dinerman, the immediate outlook for women in university-level teaching is grim indeed. They fail to make any substantial

²⁰²Arlie Russell Hochschild, "Inside the Clockwork of Male Careers," Women and the Power to Change (New York: McGraw Hill, 1975), pp. 47-49.

²⁰³T. Jeana Wirtenberg and Charles Y. Nakamara, "Education: Barrier or Boon to Changing Occupational Roles of Women?," Journal of Social Issues 32, no. 3 (1976):165.

inroads into traditionally male fields, and they are actually experiencing a decline in their former strongholds as men continue to invade educational areas which have long been considered their province. For example, schools of social work and nursing, to list a few, have been gaining status by replacing their deans with men. Also, men continue to occupy large numbers of high-ranking positions in traditionally women's colleges.²⁰⁴

The pattern of few women occupying faculty positions in traditionally male fields appears to have its origins, at least to some degree, in the relative reluctance of women students to major in these fields.²⁰⁵ Reasons for such reluctance are suggested. For example, female students may be discouraged from entering traditionally male fields because of the sex composition of the faculties, which may give students the impression that women have little chance of success in these areas. Women may also experience actual discouragement from faculty members in leading research universities, who tend to be overwhelmingly male and have prestigious reputations, than are faculty members in liberal arts colleges.²⁰⁶ The other side of the problem is explored

²⁰⁴ Dinerman, op. cit., p. 263.

²⁰⁵ Opportunities for Women in Higher Education, op. cit., p. 68.

²⁰⁶ Ibid.

by Peng and Jaffe who provide some information about women who do enter male-dominated fields. Based upon data drawn from the National Longitudinal Study of the High School Class of 1972, these researchers examined sixteen variables, which they classified into several categories: family background, high school experience, academic ability, life-goal orientation, and extent of education planned that might possibly influence women to enter male-dominated fields in higher education. Their findings indicate that those women found in male-dominated fields have higher academic ability, and they were exposed to more science and mathematics in high school.²⁰⁷

Current research indicates that women are making progress in entering natural sciences, engineering, economics and other traditionally male fields.²⁰⁸ The Carnegie Commission Report notes that the College of Engineering at the University of California at Berkeley is making an effort to attract women students. While the national average is 1 percent, 2 percent of Berkeley's engineering students are women. The Los Angeles campus of the University of California and

²⁰⁷Samuel S. Peng and Jay Jaffe, "Women Who Enter Male-Dominated Fields of Study in Higher Education," American Educational Research Journal 16 (Summer 1979):286.

²⁰⁸Astin and Hirsch, op. cit., p. 130.

Stanford University have initiated similar programs. In On Campus With Women, researchers report that the National Science Foundation (NSF) found that from 1974-75 gains in full-time employment for women faculty members in science and engineering were more than three times the gains of men. Also, the report illustrates that a 6 percent increase was registered by women compared to a 2 percent increase for men. However, even with this high rate of increase, the proportion of women having full-time employment as scientists and engineers in institutions of higher education was still only 15 percent, an increase of less than one percentage point from 1974 to 1975. In mechanical engineering, the proportion varied from less than one percent to more than 24 percent of sociologists.²⁰⁹

Additional Sex Specific Factors
Affecting Career Opportunities
of Women Faculty

Women who reach educational levels and become professional participants in institutions of higher learning often still find themselves subjected to additional sex specific factors that may or may not impede their careers. The literature reveals several broad categories which include: acceptance by associates of

²⁰⁹ On Campus With Women, loc. cit.

women faculty, job mobility, job satisfaction, and personality characteristics of women faculty members.

Acceptance by Associates
of Women Faculty

A number of reports indicate that women occupy a disadvantaged position in their interactions with colleagues. Frazier and Sadker write:

It has been found that academic women do not enjoy full collegial relationship with male faculty members with whom they work and that these male colleagues, responding to sex status rather than occupational status, deny her experiences that might further her professional development.²¹⁰

According to Lewin and Duncan, social barriers do exist for women.²¹¹ White observes the difficulty of women in attaining challenging interaction with male colleagues, and sums up the situation by stating how difficult it is for women to gain the informal signs of recognition and belonging within the institution.²¹² Bryson, Bryson and Johnson indicate in their study that job satisfaction with the regard of colleagues is sex related. Younger women who are married express the greater dissatisfaction

²¹⁰Frazier, op. cit., p. 165.

²¹¹Arie Lewin and Linda Duncan, "Women in Academia," Science 3 (September 1971):892.

²¹²Martha S. White, "Psychological and Social Barriers to Women in Science," Science 170 (October 1970):892.

in this measure.²¹⁴ Summing up the situation, Richardson states:

Even the least radical of women, then, is apt to notice that she has spent much time and energy training for a job in which she will not be welcome, amidst colleagues whose values are unconsciously designed to cripple her.²¹⁵

Other reports have dealt with female stereotypes that adversely affect the full acceptance by associates of women faculty members. Such stereotypes present an image of women that "is narrow in focus and fail to take into account complex psychological and experimental variables."²¹⁶ Such stereotypes also provide unrealistic models of interaction between men and women faculty members. According to Berry and Kushner, a popular stereotype is the Queen Bee concept, the image of the hard-headed, two-fisted woman professional who has achieved success where others have failed.²¹⁷ The Queen Bee is characterized as highly competitive, allowed into the system as a token who must cooperate uncompromisingly to remain in the system. She

²¹⁴Betty Richardson, Sexism in Higher Education (New York: The Seabury Press, 1974), p. 102.

²¹⁵Ibid.

²¹⁶James Berry and Richard Kushner, "A Critical Look at the Queen Bee Syndrome," Journal of NAWDAC, Summer 1975, pp. 173-176.

²¹⁷Ibid.

is rewarded highly for denigrating other women's efforts, looking feminine, and thinking like a man. The writers sum up the characteristics of the Queen Bee:

Since she refuses to identify with other women, the Queen Bee identifies with male colleagues as her reference group The Queen Bee does not, for the most part, identify with men in the political sense, but rather identifies with her male colleagues as equals with whom she happens to share similar work experiences.²¹⁸

In another commentary, The Community and Junior College Journal has editorialized on other stereotypes found in post-secondary institutions. One such stereotype is the well-trained woman faculty member who has learned to get along with associates and who appreciates the value of teamwork, which she interprets as accepting without question any task, from making the coffee to taking notes. For the women who resists playing this assigned position on the decision-making team, other plays could be used. For example, the "Big Daddy/Little Woman Syndrome," "Mother/Son Number," and the "Stag Effect." In the first model, the male professional expects his female counterpart to conduct herself like a dutiful wife toward a husband who spends important time meeting the demands of a professional day. He stresses the demands and pressures of a decision, for example, while the woman professional is expected to respond with

²¹⁸ Ibid., p. 175.

nurture and support. The next model, employed only in confidential situations, is based on the childhood experience where the youngster coaxed his mother to pity rather than punish him for any wrongdoing. The professional woman, then, is made to feel guilty for her part in the relationship. Either she has not measured up to his expectations, or she is too guilty to disagree on any decisions or blame him for any shortcomings. The last model, the Stag Effect, is used to underscore innate differences between the two. This model of professional interaction simply excludes the woman faculty member from channels of professional communication and from participating in extracurricular professional activities.²¹⁹ Such exclusionary behavior can seriously handicap a woman's career options.²²⁰ As Frazier claims:

Women faculty members are denied easy social access to and communications with publishers and editors, who are usually male, and frequently it is during such social occasions that requests to chair a panel or to write an article or a book are made.²²¹

²¹⁹Community and Junior College Journal, December/January 1976, pp. 12-14.

²²⁰Ibid.

²²¹Frazier, op. cit., p. 165.

Job Mobility

Another barrier to employment and advancement opportunities for faculty women is based on stereotypes concerning women's attitudes toward work, particularly regarding mobility constraints. Richardson writes about women seeking faculty positions stating that:

There is evidence that a woman's personal life, especially her marital status, is considered a relevant factor in her application For a woman, it is a substantial advantage to be single The married woman is assumed to be subject to her husband's whims, goals, and job mobility.²²²

Astin informs us that male recruiters often operate on the belief that, because of family commitments, married women will not be interested in the job or able to make a move.²²³ These attitudes and practices are sometimes fostered not only by recruiters and employers, but also by faculty women themselves seeking positions. As Astin points out, the woman in our culture has been socialized to follow her husband who is allowed to make his own career decisions first.²²⁴ However, such generalized statements may be shattered by the facts. In the same

²²²Richardson, op. cit., p. 106.

²²³Helen S. Astin, "Where Are All the Talented Women?," in W. Todd Furniss and Patricia Alberg Graham, eds., Women in Higher Education (Washington, D.C.: American Council on Education, 1974), pp. 95-109.

²²⁴Ibid.

report, Astin explains that the occupational and geographical mobility of women doctorates follows a pattern similar to men with doctorates. According to Astin:

Of the 1957 and 1958 women doctorates . . . 45 percent had been with the same employers since receiving the doctorate, and an additional 30 percent had changed jobs only once. These figures are comparable with the rates for men reported by Harmon . . . who found that 52 percent of the men in the 1955 doctoral cohort had stayed on the same job for five years, and an additional 33 percent had changed jobs only once.²²⁵

Advancement depends on women's ability to receive merit increases and promotions on par with men. However, the Carnegie Commission Report provides data that show married women falling behind in academic rewards because they take time off for family responsibilities. Also, women are taken advantage of because they have less bargaining power. Such constraints include the woman's inability to move to another college or university at some distance unless she can convince her husband to move. For men, their largest salary increases may tend to come when they receive attractive offers from other institutions. Such an offer is either accepted and the move is accomplished, or based on such an offer, the professional male may be

²²⁵ Helen S. Astin, The Woman Doctorate in America: Origins, Career, and Family (New York: Russell Sage Foundation, 1969), p. 67.

able to convince his present institution to make a counter offer. Such negotiations are not possible for a married woman unless it is clear that her husband is willing to make a move. The report concludes by stating that "married women are not particularly likely to receive unsolicited job offers involving geographical moves, because of the assumption that they would not be likely to accept."²²⁶

It would seem reasonable to conclude from these studies that generalized reports about women's position in the faculty becomes part of the myth system when they are used to make assumptions and decisions about faculty women as a group. However, it is usually necessary to allow for individual differences no matter how true the generalization appears. As researchers remind us, mobility constraints are changing. It is not uncommon for modern academic couples to give equal consideration to the wife's employment status in the decisions that might involve relocating. As Astin concludes, " . . . frequently the husband may decide to look for a job after the wife has made a decision to relocate."²²⁷

²²⁶ Opportunities for Women in Higher Education, op. cit., pp. 121-122.

²²⁷ Astin, op. cit., p. 97.

Job Satisfaction

A number of investigators have examined job satisfaction involving faculty members in institutions of higher learning. For example, Eckert, Stechlein and Sagen argue that the three most common reasons for job dissatisfaction among college faculty members are low salaries, heavy workloads and overall working conditions. They also point out that the nature of the work itself is the most common source of satisfaction and teachers in four-year colleges are more satisfied than junior college teachers.²²⁸ Similar conclusions are drawn by other researchers. Crim reports that in his study "faculty women see salary as their major source of inequity with their male peers."²²⁹ Other sources of inequity as seen by faculty women include "being treated fairly on tenure and promotion decisions, participating on important committees and in decision-making."²³⁰ Frazier and Sadker maintain that "once hired, women should receive equal pay for equal rank and be promoted on an equal basis with male faculty members."²³¹

²²⁸R. E. Eckert, J. E. Stecklein, and H. B. Sagen, "College Faculty Members View Their Jobs," AAUP Bulletin 45 (1959):513-518.

²²⁹Crim, op. cit., pp. 18-19.

²³⁰Ibid.

²³¹Frazier and Sadker, op. cit., p. 168.

According to Benoit, a 1970 national sample of faculty indicated that 63 percent of all women but only 28 percent of all men earned less than \$10,000.00 during an academic year. In addition, women showed less satisfaction with their salaries and were more likely than their male colleagues to express their dissatisfaction if they were employed at universities than at two-year or four-year colleges.²³² Studying faculty members in the junior colleges, Cohen reports that the principal motivation and chief satisfaction of faculty members come from their interaction with students.²³³

In her review of the literature, Benoit finds that in Herzberg's 1957 review of fourteen studies, six revealed that women were more satisfied with their jobs than men, three indicated that men were more satisfied, and five studies showed no sex differences in job satisfaction.²³⁴ Benoit concludes in her study that faculty women in her sample were dissatisfied with their work to some extent. When compared with other groups, such as teachers, principals, nurses and secretaries, faculty women in the state universities were least

²³²Benoit, op. cit., p. 13.

²³³Arthur M. Cohen, Work Satisfaction Among Junior College Faculty Members, U.S., Educational Resources Information Center, ERIC Document ED 081 426, November, 1973.

²³⁴Benoit, op. cit., pp. 25-26.

satisfied. However, the women in the various disciplines within the universities did not differ in their feelings of job satisfaction. Moreover, women with broader teaching backgrounds, that is, who had teaching experience in other areas, such as elementary and secondary institutions, were more satisfied than those women who had taught only in institutions of higher education. Administrators were more satisfied than non-administrators, and administrators generally were more satisfied than the teachers. Also, those faculty members who had published books were more satisfied than those who had not published. After analyzing and quantifying environmental work elements affecting job satisfaction of faculty women, Benoit concludes that such internal factors as moral values, social service, activity, achievement and creativity (in descending order of importance) were the aspects of the job giving the faculty women in her sample most satisfaction, and such external factors as university policies and practices, advancement, compensation, supervision--human relations, and supervision--technical (listed in ascending order of importance) were aspects of the job giving faculty women least satisfaction. Basing her conclusions on Herzberg's two-factor theory of job satisfaction, Benoit's study confirms the theory that, while improvement of external factors may reduce job

dissatisfaction, such improvement will not necessarily produce job satisfaction as job satisfaction seems to rest in the nature of the job.²³⁵

After examining dual-career couples, Bryson, Bryson and Johnson note differences between husbands and wives in terms of job satisfaction. Wives expressed less satisfaction with the amount of time available for professional activities. In addition to indicating greater problems caused by differential achievement, wives were also more dissatisfied with their rate of advancement, opportunity to interact with colleagues, and freedom to pursue long-range occupational goals. They were also dissatisfied with their scholarly output. The wives had published fewer articles and presented fewer papers at conventions.²³⁶

Personality Characteristics of Women Faculty

In their attempt to discern significant underlying reasons for differential treatment of faculty women, investigators have not only identified overt discrimination as a probable cause, but also many have

²³⁵Ibid.

²³⁶Rebecca Bryson, Jeff B. Bryson, and Marilyn F. Johnson, "Family Size Satisfaction, and Productivity in Dual-Career Couples," Psychology of Women Quarterly 3 (Fall 1978):67-77.

pointed to other possibilities believed to be responsible for the formation of sex specific personality characteristics that may or may not impede efforts of faculty women to achieve adequate career goals. Petit maintains that, according to her sample, administrators and faculty women believed that women are not as competitive in seeking advancement as faculty men and, by accepting subordination too readily, faculty women have hampered their professional career chances. Petit suggests that faculty women should broaden their career interests because women, more so than men, have to demonstrate their competence.²³⁷ Referring to Bernard's study, Davis reports that of 706 college teachers in Minnesota, 27 percent of whom were women, the women were much more tentative, modest and more influenced by others in their careers than were the men.²³⁸

According to some investigators, limitations placed on careers of women are attributed, at least in part, to psychological-cultural factors. Graham refers to a report by Ellen and Kenneth Keniston which explains the concept of internal ambivalence, experienced by

²³⁷Rita M. Petit, "Attitudinal Study of Faculty Women in Higher Education in Northwest United States," Ph.D. dissertation, University of Montana, 1972, pp. 104-105.

²³⁸Ann Davis, "Women as a Minority Group in Higher Academics," American Sociologist (May 1969):97.

numerous women planning to combine marriage and careers as a conflict of basic interests. Such conflicts are especially acute in the years between 18 and 25, critical periods for both sexes. For men, this is a time generally devoted to intensive preparation for a career. For women, this is a time to experience a variety of doubts as women seek affirmation of their femininity. Women are sometimes uncertain about whether they should have a career. This uncertainty makes it difficult for them to aspire to high levels of achievement in the academic world.²³⁹ Rose Coser and Gerald Rokoff note that while society values equality, and even as equal opportunity avails itself to women, professional women could be victims of a basic conflict. The authors explain:

The conflict stems not simply from participation in two different activity systems whose claims on time allocations are incompatible, but it also stems from the fact that the value underlying these demands is contradictory: Professional women are expected to be committed to their work "just like men" at the same time as they are normatively required to give priority to their family.²⁴⁰

For women, this conflict between loss of femininity and being self-assertive, thinking

²³⁹Graham, op. cit., p. 1285.

²⁴⁰Rose L. Coser and Gerald Rokoff, "Women in the Occupational World: Social Disruptions and Conflict," Social Problems 18 (Spring 1971):535-554.

aggressively, having independent strivings. Initiating, exploring and attaining intellectual achievement is examined by Matina Horner who presents evidence that not only are women conditioned not to compete, but also not to succeed. Women are socialized to believe that success leads to social ostracism and loss of femininity; therefore, the more she desires success, the higher the penalties may be exacted by society.²⁴¹

Another reason often cited for the differential treatment of women is their drive and motivation. Hornig remarks that serving as another self-fulfilling prophecy is the charge against women that they may have routine academic ability, but lack the drive and motivation required to attain top academic positions. Hornig points out that, "If discriminatory practices block her route to advancement, no amount of drive will get her there," and she concludes, "women quite obviously need more drive and motivation than men to persist at all in academic pursuits."²⁴²

Among those writers who see conflict in women's competitiveness, or lack of it, is Hochschild, who maintains that women are discouraged by competition as

²⁴¹Matina Horner, "Toward an Understanding of Achievement Related Conflicts in Women," Journal of Social Issues 28, no. 2 (1972).

²⁴²Hornig, op. cit., p. 13.

such situations tend to lower ambition in women. Even with supportive mentors, many women experience something tangibly frightening about an environment that is highly competitive--competitive argumentative writing; competitive seminar talk.²⁴³ Margaret Hennig and Anne Jardin postulate that girls are trained in activities that are non-competitive, while boys are trained in competitive sports, which can be used later to significant advantage in the world of work.²⁴⁴ This, of course, is part of the socialization process.

A number of writers argue that the socialization process operates to prevent many women from acquiring attitudes and skills needed later in life to undertake the demanding, time consuming preparation and continued efforts necessary for successful careers. Davis refers to Bernard's study which mentions that the academic quest is highly competitive, and "women are not generally socialized into such a role and do not compete in the same manner."²⁴⁵ Tibbits explains the situation by stating that historically women have been conditioned to be inferior. They have been reinforced by the socialization process to be nurturant, docile, submissive and

²⁴³Hochschild, op. cit., p. 55.

²⁴⁴Margaret Hennig and Anne Jardin, The Managerial Woman (New York: Pocket Books, 1978).

²⁴⁵Davis, op. cit., p. 97.

conservative. Instead of being concerned about their own development, women have been taught that men's development is more important.²⁴⁶ Schlossberg mentions that women have been deluded into thinking that men and women have been deluded into thinking that men and women have innately different functions. Through the socialization process, women have been taught to believe that men are breadwinners and women are primarily homemakers; women assist, while men assert; women emotionalize, while men analyze. The writer concludes by stating that, "There is a sinister force in education trying to inhibit the progress of women."²⁴⁷ Summing up the situation Suelzle states that:

At the present time there is an elaborate educational system designed to teach women to underestimate themselves A recent study of five social studies textbooks written for grades one to three revealed that men were shown or described in over 100 different jobs and women in less than 30 Women are shown as having so few jobs of interest available to them that they might as well stay home and have children.²⁴⁸

²⁴⁶ Sylvia-Lee Tibbits, "Sex Role Stereotyping? Why Women Discriminate Against Themselves," Journal of NAWDAC, Summer 1975, pp. 180-181.

²⁴⁷ Schlossberg, op. cit., p. 257.

²⁴⁸ Marijean Suelzle, "Women in Labor," in James Henslin and Larry T. Reynolds, eds., Social Problems in America (Boston: Allyn and Bacon, 1979), p. 167.

A final statement about the socialization process is provided by Schlossberg who maintains that early socialization "anticipates the division of labor that later determines which spouse makes the sacrifice to keep the home intact."²⁴⁹ According to the writer, women's occupational aspiration is also determined by early socialization. Schlossberg refers to Jean Lipman-Blunner's description of the phenomenon labelled the vicarious achievement ethic:

To experience achievement satisfaction through the accomplishment of another individual is the essence of the vicarious achievement ethic. This ethic directs women into traditionally feminine roles by indicating the appropriateness of indirect achievement through helping, supporting, nurturing. This is reflected in the occupational distribution of women in the labor force.²⁵⁰

These reports point to the fact that personality characteristics could impede or facilitate efforts of faculty women to achieve a successful career. Recent reports indicate that changes may be in the process of being realized. Astin and Hirsch remind us that, based on recent surveys of entering classes, many differences between the sexes are narrowing. Women's career plans and educational aspirations represent perhaps the most dramatic change. As was mentioned in another section,

²⁴⁹Schlossberg, op. cit., p. 260.

²⁵⁰Ibid.

more and more women are opting out of traditionally feminine fields and choosing traditionally masculine careers such as engineering, medicine, law, and business.²⁵¹ Schlossberg notes that the degree aspiration of women has risen at a much sharper rate than for men. She explains that the proportion of women who as freshmen indicated that they planned to enter law or medicine quadrupled between 1967 and 1973 from 2 percent to 8 percent, compared to the proportion of men with such plans which only doubled from 9 percent to 18 percent. In addition, the proportion of male freshmen who said they wanted a Ph.D. dropped slightly from 14 percent in 1967 to 12 percent in 1973, as the proportion of women planning to obtain the Ph.D. rose from 5.7 percent to 9.6 percent.²⁵²

Research Related to the Study

A number of studies stand out more than others as having some influence upon the present study. In their study based on almost two hundred women faculty members in Minnesota's thirty-two public and private colleges, Eckert and Stecklin focused on those factors influencing the choice of college teaching as a career for women. The researchers state in their findings

²⁵¹Astin and Hirsch, op. cit., p. 110.

²⁵²Schlossberg, op. cit., p. 259.

that, despite the fact that they were typically six years older, women faculty members in Minnesota's institutions of higher learning, more so than their male counterparts, arrived at their present positions more by accident than by design. This condition can be traced to a number of factors. In securing advanced training, the women were financially handicapped. As a result, many of them spent long periods teaching on the staff of elementary and secondary schools; only a few had earned a doctor's degree or had been promoted beyond an assistant professor's level. The issue of job satisfaction was also explored and the researchers found that women faculty members appeared to be equally as satisfied with their career choice as their male colleagues; however, the pattern of their reported satisfaction was somewhat different. While men emphasized material rewards, opportunities to be creative and the freedom and independence provided by faculty service, women emphasized good human relations as their major source of satisfaction. Several recommendations were suggested by the findings. First, an increase in efforts to acquaint undergraduate women with teaching opportunities and satisfactory careers must be made good; secondly, adequate financial support for graduate studies must be made more widely available to students who qualify for such support; and, finally, more in-service education

must be provided to encourage women teachers to complete doctoral requirements.²⁵³

Concerned about the shortage of faculty women in institutions of higher education, Berwald proposed that such shortages could be alleviated through increased employment of women faculty members provided that college officials were willing to hire women, and women were interested in teaching in colleges and universities. Berwald sent questionnaires to three groups: first, the deans of all four-year, coeducational, non-technical institutions accredited by the North Central Association, and five departmental or divisional chairpersons randomly selected from each of the institutions; secondly, questionnaires were sent to a random sample of ten female and male faculty members in each of the thirty schools; and, finally, questionnaire were sent to ten female and ten male seniors in each of the thirty institutions. Major findings and conclusions of attitudes toward women college teachers were that deans, departmental chairpersons, and faculty do not feel that employment opportunities are equal for women and men,

²⁵³"A Study of Job Motivations, Activities, and Satisfactions of Present and Prospective Women Faculty Members," partial report submitted to the Department of Health, Education and Welfare, May 31, 1960; and R. E. Eckert, J. E. Stecklein, and H. B. Sagen, "College Faculty Members View Their Jobs," AAUP Bulletin 45 (1959):513-528.

and that there were differences of opinion with regard to the six dimensions examined, namely, personality characteristics, job mobility, teaching effectiveness, the production of research and other scholarly writing, the importance of contributions to the profession and community, and the degree of acceptance accorded women by their associates. According to the study, attitudes and practices of hiring officials strongly favor the selection of males over females. Based on the findings, Berwald suggested that more training for women is needed if they are to be accepted as college and university teachers, and more encouragement by high school and college faculty and administrators is also needed.²⁵⁴

Simpson sampled employing agents and found that they did exhibit discriminatory attitudes toward academic women in their employment choices of equally qualified female and male candidates. The researcher found no significant differences between male administrators and male faculty toward female and male candidates who were equally qualified. All groups sampled consistently selected the superior female candidate, however. While degrees and rank had little influence on the employment

²⁵⁴Helen D. Berwald, "Attitudes Toward Women College Teachers in Institutions of Higher Education Accredited by the North Central Association," Ph.D. dissertation, University of Minnesota, 1962.

selection of female candidates, age, sex and experience had a significant influence.²⁵⁵

Following along a similar design, Petit wished to elicit opinions and attitudes concerning faculty women in higher education. Her subjects included deans, vice presidents, and selected faculty women from fifty-three institutions in the states of Idaho, Montana, Nevada, Oregon, Utah and Washington. In addition, Petit interviewed a selected group of faculty women from nine institutions located in Montana. The groups were questioned concerning equal opportunities for employment and advancement of faculty women and differences between women and men as faculty members in higher education along the dimensions of personality characteristics, job mobility, teaching effectiveness, contributions to the profession, and acceptance by associates. According to the author, major findings revealed a sharp contrast between the administrators, that is, deans and vice presidents and faculty women as to equal opportunities for women and men in the institutions, particularly around the area of academic rewards, as faculty women indicated they were often bypassed for promotion. The author states:

²⁵⁵Simpson, loc. cit.

It would appear that, in theory, deans and vice presidents agreed to the extension of equal opportunities of employment and advancement to men and women in higher education, but, in practice, such equal opportunities were not always extended to faculty women. This could be detected by salary and rank differentials reported by deans . . . and by opinions expressed by faculty women.²⁵⁶

Other notable findings included the fact that job mobility, personality characteristics, and production of research and other scholarly writing were major points of disagreement between the two groups. Contrary to most faculty members the administrators, for example, believed that women were not as competitive in seeking advancement as faculty men, that few faculty were motivated enough to employ the needed effort to earn advancement to higher ranks, that few faculty women stayed in their positions long enough to earn promotions, and that faculty women were often bypassed for promotion. Petit concludes her findings with the information that both groups agreed to two other significant points; namely, that faculty women should learn to broaden their career interests and that women's potential in higher education has been neglected. She recommends that institutions should take active measures to insure implementation of an effective equal opportunity policy, that an affirmative action compliance

²⁵⁶Petit, op. cit., p. 100.

should be clearly defined, that there should be institutional recruitment for the appointment of new staff, with no final appointment made until women candidates had been sought and encouraged to apply, that the institution's policy toward equal opportunity and affirmative action compliance programs should be made aware to all members of the institution, and that a board should be established to re-educate men regarding the roles of both sexes.²⁵⁷

In a recent investigation, Crim studied current attitudes and opinions of faculty women and men toward faculty members in institutions of higher education for the purpose of identifying factors which might influence the general attitudes of faculty toward faculty women. His subjects included a full-time faculty of the institutions of higher education associated with the New Hampshire College and University Council. The purpose of the study was to determine if men and women had similar attitudes and opinions regarding employment and advancement opportunities, job mobility, personality characteristics, teaching effectiveness, production of research and other scholarly writing, contributions to the profession, acceptance by associates, and use of full potential of women faculty members. Crim maintains

²⁵⁷ Petit, op. cit., pp. 98-113.

that, "Discriminatory attitudes held by both men and women may still persist, but the findings of this study indicate that they are fewer in number and have lost some of their intensity."²⁵⁸

When asked about employment and advancement opportunities for women, both women and men respondents agreed that women are both qualified and competitive in seeking employment and advancement in higher education, and that the turnover rate of faculty women is not higher to that of faculty men. Moreover, both groups agreed that faculty women are just as geographically mobile as their male colleagues, and they do stay in positions long enough to earn promotions to upper ranks. Also, the group agreed that equal pay for equal work for both sexes is desirable. On the other hand, a significantly larger percentage of females reported that employment opportunities at their institutions are not equal, and women and not men indicate that discrimination takes place in the promotion process. A majority of the women indicated that faculty women are often bypassed for promotion. A majority of both groups indicated advancement of women is a slow process, but a significantly larger percentage of women indicated advancement was slower for faculty women, while a

²⁵⁸Crim, op. cit., p. 83.

significantly larger percentage of men took the opposite view.

Differences of opinions concerning the utilization of the full potential of faculty women were indicated. Men felt more strongly than women that the opportunities for faculty women to develop to full potential presently exists; however, women indicated that the exploration of the potential of women in higher education has been neglected.

Exploration of other aspects of the job, including teaching effectiveness, and research and other scholarly writing revealed that a significantly larger percentage of women than men expressed the opinion that faculty women are more dedicated and responsible, but are prevented from being effective teachers because of cultural attitudes. Although both groups agreed that faculty women produce the required research, a significantly larger percentage of women than men indicated that faculty women publish less.

In terms of personality characteristics, the findings indicate that, although a small majority of the women disagreed, a large majority of men expressed the opinion that faculty women accept subordination more readily than men. A large majority of women indicated faculty women should learn to broaden career interests, while a small majority of men disagreed. According to

both groups, faculty women do want equality and decision-making responsibilities, and they do have commitment and competitive spirits.

Crim recommends the necessity of re-educating women and men, with respect to their roles and the means of performing them, and he advocates that institutions must take active measures to insure effective implementation of equal employment and promotion policies, and the establishment of non-discrimination policies throughout the institutions of higher learning.²⁵⁹

²⁵⁹ Ibid., pp. 71-85.

CHAPTER 3

METHODS OF THE STUDY

In this chapter, the writer will describe the procedures and activities carried out in planning and conducting this study.

Population of the Study

The total population of this study consisted of faculty women and men employed at Michigan State University during the academic year 1978-79 in the Department of American Thought and Language of University College, now part of the College of Arts and Letters, and five departments in the College of Business: Business Law and Office Education, Management, Hotel and Restaurant Management, Marketing and Transportation, and Economics.

Procedure of the Study

The Preliminary Interview

At the beginning of the summer quarter 1979, the author of this research began the questionnaire which would be sent to a selected group of faculty women and men in two separate colleges at Michigan State University. The Department of American Thought and Language

of University College was selected because, out of a total of 102 faculty members, 48 or 49 percent are women faculty members. Four of the five departments in the College of Business were selected because, out of 122 total faculty members, eleven or 11 percent are women.

The questionnaire was designed to explore the nature of faculty women's positions, the relevant conditions of employment, and a comparison of their status and attitudes with those of their male colleagues as perceived by both women and men faculty members. Early in the planning process, it became apparent that considerable help might be obtained from a group of women and men faculty members. The answers they might give to a series of open-ended questions would be useful in yielding suggestions of areas needing study, or hypotheses to be tested in the investigation to follow.

This help was obtained through a series of interviews. The group of faculty members asked to cooperate in this preliminary interview can best be described as follows: Their genuine interest in this type of research could be presupposed because of their involvement in activities or procedures related to the improvement of opportunities for women at institutions of higher learning, such as affirmative action procedures, publications and research, courses offered or seminars conducted, or membership in women's

organizations on campus. The tabulation in Table 2 shows the distribution by field, academic rank, and sex of faculty members interviewed.

TABLE 2.--Distribution of Faculty Members Interviewed.

Rank	Number		Area
	Women	Men	
Professor		2	Administration
	1		Counseling Education
	1	1	Psychology
Associate Professor	2		American Thought and Language
	1	1	Education
	1		Humanities
Assistant Professor			Psychology
	1		Administration
	1	1	American Thought and Language
	1	1	Humanities
TOTALS			Psychology
	9	6	

The interviewer called each faculty member and arranged an appointment. Interviews averaged about an hour in length and were valuable to the later development of the study. Questions asked included the following:

1. What should be studied in relation to improving the status of women faculty members?

2. Are there equal opportunities for employment and advancement of women faculty in your department?
3. On what basis are faculty members in your department rewarded and advanced? Is it the same or different in other departments of your college? Are there any sex differences in promotional policies?
4. Are potential abilities of faculty women fully utilized in your department?

Data Gathering Procedures

As the study was concerned with attitudes toward faculty women in higher education, it was considered desirable to compare the attitudes of faculty women and faculty men toward women in academe. On October 25, 1979, the investigator mailed to each faculty member selected a packet containing a cover letter, a questionnaire, and a returned, self-addressed envelope. The cover letter (see Appendix A) explained the purpose and nature of the study, and gave instructions for the completion and return of the questionnaires. Numerical coding of each survey questionnaire mailed to the study population permitted identification for follow-up requests. On January 7, 1980, a follow-up packet was mailed to those faculty members who had not responded to the original request. In the last week of February, telephone calls were made as a final measure to those recipients of the survey questionnaire who had not

responded to the original request or the follow-up request to ask personally for their assistance.

The Instrument of the Study

The instrument used for the present study consisted of a list of items formulated by this investigator to be used to obtain information on opinions and attitudes toward faculty women in academe by comparing the attitudes of selected women and men faculty members, and by comparing the status and opportunities of faculty women to that of faculty men. The survey questionnaire was composed of two parts.

Part I consisted of questions in five areas of interest to be used in reporting the profile of the respondents: vocational experience, career patterns, biographical background, family background, and educational background. The questions were selected for usability from A Catalog of Life History Items.¹ The questions also followed the criteria developed by William A. Owens et al., which stated that questions should be brief, numbers should be used whenever possible to graduate or define options or alternatives, and items

¹J. R. Glennon, L. E. Albright, and W. A. Owens, A Catalog of Life History Items, Scientific Affairs Committee, American Psychological Association, Division 44, 1966.

should carry a neutral or pleasant connotation for the respondent.²

Part II comprised ninety-one items, highlighting issues of the questions under study concerned with the status of academic women along the dimensions of the following: employment and advancement, personality characteristics, job mobility, research and other scholarly writing, acceptance by associates, utilization of the full potential of faculty women, job satisfaction, and alternative work patterns. Although the questionnaire items included routine questions designed to obtain pertinent information, and many of the questions were based on untested opinions and assumptions found in the literature related to the thesis topic, certain procedures were adopted to insure adequate validation. The content and criterion validity were accounted for by reviewing the related literature, using try-out forms, and making a post-hoc criterion check.

Literature Related to the Formulation of the Questionnaire

In preparing the questionnaire, the related literature concerned with the career development of

²William A. Owens, J. R. Glennon, and Louis E. Albright, "Retest Consistency and the Writing of Life History Items," Journal of Applied Psychology XLVI (1962):375-384.

faculty women was reviewed. It was found that several investigators developed a questionnaire for gathering information on the subject under present investigation. For example, Berwald constructed and employed three questionnaires--an administrative questionnaire for deans, or comparable officials, and departmental or divisional chairpersons; a faculty questionnaire; and a student questionnaire. Designed with the intent of comparing (wherever possible) opportunities in college teaching for women with those afforded men, and since no absolute scale existed on which to measure only the status of women, all the questionnaires repeated three items to facilitate a comparison of attitudes of administrators, faculty and students.³ Petit prepared her questionnaire by reviewing the related literature concerned with the employment and advancement of faculty women in higher education, the differences between women and men faculty members, and the utilization of the full potential of women faculty. The author formulated a list of items to be used to obtain information on opinions and attitudes toward faculty women. Although many items were based on untested opinions, all items were considered by Petit to be of timely significance to women faculty. The opinionnaire was prepared for three

³Berwald, op. cit.

reference groups: deans, vice presidents, and faculty women. The instrument was composed of two parts. Part I was different for each group, whereas Part II was the same for the three groups. Biographical data to be used in reporting the profile of the respondents composed Part I. Also, for the deans, Part I included brief information on the faculty and students, which provided some knowledge on a general profile of the institutions in the sample. Part II had a total of thirty-two items highlighting issues of the questions under study. The researcher conducted semi-structured personal interviews with faculty, which acted as a check on the reliability of the data obtained.⁴ In his study, Crim was concerned with attitudes toward faculty women in higher education and found it useful to employ the survey instrument developed by Petit in order to gather his data. The content and criterion validity of the instrument was insured by the item development process, the pilot studies, and a post-hoc criterion check.⁵

Try-Out Forms

Try-out forms of the questionnaire were sent to two male faculty members in the Department of Accounting, College of Business; three male and one female faculty

⁴Petit, op. cit.

⁵Crim, op. cit.

members in the Department of Social Science; and two male and two female faculty members in the Department of Humanities, University College--all at Michigan State University. Individuals participating in the try-out phase of the study gave helpful suggestions. Some devoted considerable time providing useful feedback and reaction to various items, offering personal experiences appropriate to the subject investigated. Those suggestions which seemed relevant were incorporated in the final form of the questionnaire. Another important valuable source of information provided by the try-out form was the information it provided as to length of time required to complete the form.

Acquisition of the Data

The document which showed the number and percentages of faculty by academic unit, entitled Affirmative Action at Michigan State University,⁶ indicated that the Department of American Thought and Language, University College, had a total of 102 faculty members who were male, and 48 faculty members who were female, whereas the College of Business had a total of 112 male and five female faculty members. This sharp contrast played an important role in the decision to study this population.

⁶Affirmative Action at Michigan State University 1977-78, Annual Report to the Department of Health, Education and Welfare, p. 50.

Directories for the academic year 1978-79 were obtained from each department of the two colleges in order to obtain the names of the faculty members.

To determine an acceptable response rate for the survey instrument, the study adopted the response rate recommended for survey research as identified in a review of survey literature.⁷ Babbie and other authorities in the field of survey research conclude that the body of inferential statistics used in connection with survey analysis assumes that all members of the initial sample complete and return their questionnaires.⁸ However, since 100 percent response rate is rarely achieved, Babbie suggests the following response rates, which were used as guidelines for data collection and analysis in this study: 50 percent adequate for analysis and reporting; a response rate of at least 60 percent is good; and a response rate of 70 percent or more is very good. Although the return rate of this survey was 60 percent (see Table 3), it is still considered by this researcher to be inadequate, especially

⁷Earl R. Babbie, Survey Research Methods (California: Wadsworth Publishing Company, Inc., 1973), pp. 165-169; Gene F. Summers, ed., Attitude Measurement (Chicago: Rand McNally & Company, 1971); Marjorie N. Donald, "Implications of Non-Response for the Interpretation of Mail Questionnaire Data," Public Opinion Quarterly 24, no. 1 (1960):99-114.

⁸Ibid.

TABLE 3.--Mailed and Returned Questionnaires.

Department	Mailed Questionnaires To			Questionnaires Returned By			Percentage Responding		
	Women	Men	Total	Women	Men	Total	Women	Men	Total
<u>University College</u>									
American Thought and Language	48	54	102	36	40	76	75	74	76
<u>College of Business</u>									
Business Law and Office Management	4	11	15	2	9	11	50	82	73
Hotel and Restaurant Management	1	11	12	1	3	4	100	27	33
Management	1	25	26	1	11	12	100	44	46
Marketing and Transportation	2	17	19	2	4	6	100	24	32
Economics	1	46	47	1	19	20	100	41	43

Total questionnaires mailed: 225

Total questionnaires returned: 136

Total percentage responding: 60

for a local population. Every reasonable attempt was made to increase the response rate, but failed. It is recognized that perhaps the inclusion of the missing 40 percent might have generated quite different results.

Analysis of the Data

The data from the questionnaire were recorded on punched cards to facilitate analysis. Responses to each item on the attitude survey were assigned a value 1 (strongly agree), 2 (agree), 3 (disagree), and 4 (strongly disagree). Each item in the survey was grouped under one of fifteen broad categories representing a summary of variables under investigation. This was considered necessary for ease of computation and reporting, and for insuring sophisticated analysis. The following is a list of the fifteen categories and items appropriate to each category:

Category 1. Data related to the employment of faculty women. Items numbered 17, 21, 23, 31, and 104 related to the employment of faculty women in higher education.

17. Employment opportunities are equal for men and women.
21. Employing agents favor employing women better qualified than men, as members of the faculty.
23. Employing agents tend to think automatically in terms of men when filling a new position on the faculty.

104. When I was looking for my first job, a faculty member sponsored me and served as my mentor.

Category 2. Data related to the advancement of faculty women. Items numbered 18, 22, 27, 37, and 71 related to the advancement of faculty women in terms of promotion.

- 18. Few faculty women meet the preparation requirements for promotion to upper ranks.
- 22. Few faculty women stay in their positions long enough to earn promotions to upper ranks.
- 27. There should be a merit system of appointment and promotion in higher education regardless of sex.
- 37. Faculty women are often bypassed for promotion.
- 71. Faculty women have equal opportunity for promotions.

Category 3. Data related to the advancement of faculty women. Items numbered 19, 74, and 106 related to advancement of faculty women with regard to pay.

- 19. Women and men deserve equal pay for equal work in higher education.
- 74. Salaries are the same for faculty women and men with rank.
- 106. In my department, it is very difficult for a person to receive significant salary if he or she does not publish.

Category 4. Data related to the advancement of faculty women. Items numbered 72, 73, and 105 related to advancement of faculty women with regard to tenure.

- 72. Faculty women have equal likelihood of tenure attainment.
- 73. Tenure evaluation criteria are the same for faculty women and men in my department.
- 105. It is very difficult for a person to achieve tenure if he or she does not publish.

Category 5. Data related to advancement of faculty women. Items numbered 28, 40, 58, and 76 related to advancement of faculty women with regard to career development.

- 28. In general, advancement for women in higher education is a slow process.
- 40. Few faculty women are sufficiently interested to put forth the effort to earn advancement to upper ranks.
- 58. It is appropriate for a faculty woman to head my department.
- 76. Faculty women have equal opportunity for additional assignments.

Category 6. Data related to the advancement of faculty women (summary).

Category 7. Data related to personality characteristics of faculty women. Items numbered 24, 25, 29, 33, 38, 43, 44, 60, 61, 81, and 84 related to personality characteristics of faculty women.

- 24. Faculty women are not as competitive in seeking advancement as faculty men.
- 25. Faculty women have less of a professional commitment than do faculty men.

- 29. Faculty women do not assume responsibility in decision-making as rapidly as faculty men.
- 33. Faculty women accept subordination more readily than do faculty men.
- 38. Faculty women do want full equality, even if it does mean equal responsibility.
- 43. Faculty women should learn to broaden their career interests more persistently than they have to date.
- 44. Faculty women are more fearful than faculty men of conflicts that might endanger their professional status.
- 60. Decision-making is an important part of the work of faculty women.
- 61. It is important to faculty women to be able to make decisions about their work.
- 81. Faculty women have equal input into decision-making.
- 84. Faculty women participate in informal decisions.

Category 8. Data related to job mobility of faculty women. Items numbered 22, 32, and 35 related to job mobility of faculty women.

- 22. Few faculty women stay in their positions long enough to earn promotions to upper ranks.
- 32. The turnover rate of faculty women is higher than that of faculty men.
- 35. Faculty women are less mobile geographically than faculty men.

Category 9. Data related to teaching effectiveness of faculty women. Items numbered 20, 41, 48, and 79 related to teaching effectiveness of faculty women.

- 20. Faculty women are more dedicated to teaching than faculty men.
- 41. Faculty women are more responsive to students than faculty men.
- 48. Cultural attitudes of men colleagues and of students prevent a woman in higher education from being an effective teacher.
- 79. Faculty women have opportunities for student supervision.

Category 10. Data related to research and other scholarly writing. Items numbered 42, 77, 80, 102, and 103 related to research and other scholarly writing of faculty women.

- 42. Faculty women publish less than faculty men.
- 77. Faculty women have equal opportunity for placement of journal articles.
- 80. Faculty women have equal research possibilities.

Category 11. Data related to contribution to the profession. Items numbered 66, 67, 68, 69, 70, and 82 related to contribution to the profession of faculty women.

- 66. Faculty women often work more than the normal scheduled hours.
- 67. Faculty women have equal participation in departmental and professional activities in my department.

- 68. Faculty women serve equally on important committees in my department.
- 69. Faculty women serve on more prestigious committees than faculty men in my department.
- 70. Faculty women are encouraged to seek offices in professional organizations.
- 82. Faculty women have equal opportunity for attaining funding for conferences.

Category 12. Data related to acceptance by associates of faculty women. Items numbered 30, 39, 47, 59, 83, 85, 86, and 87 related to acceptance by associates of faculty women.

- 30. Faculty women are taken less seriously than faculty men when sent out to represent the university.
- 39. Faculty women are regarded favorably by their colleagues.
- 47. Faculty women are less responsive to their colleagues than faculty men.
- 59. Faculty women feel that co-workers make them feel an important part of the department.
- 83. Faculty women have equal opportunity to interact with colleagues.
- 85. Faculty women, more often than men, are asked patronizing questions or comments.
- 86. Faculty women, more often than men, often hear hostile questions or comments.

Category 13. Data related to the use of full potential of faculty women. Items numbered 26, 36, 56, 64, and 65 related to use of full potential of faculty women.

- 26. Faculty women who wish to develop their potential have adequate opportunity to do so.
- 36. The exploration of the potential of women in higher education has been neglected.
- 56. Faculty women are discriminated against because of their political views about the women's movement.
- 57. Faculty women feel that it is not important to express their views about the women's movement.
- 64. Faculty women do not feel discriminated against in their job because of sex.
- 65. Sex discrimination in employment practices is an important issue for faculty women.

Category 14. Data related to job satisfaction of faculty women. Items numbered 62, 63, 88, and 89 related to job satisfaction of faculty women.

- 62. Taking everything into account, faculty women are satisfied with their jobs.
- 63. It is important for faculty women to be satisfied with their jobs.
- 88. Support from my department chairperson has fostered my job satisfaction in my department.
- 89. I attribute my job satisfaction, in part, to the fact that I have achieved my present rank in my department within a reasonable time period.

Category 15. Data related to alternative work patterns of faculty women. Items numbered 49, 50, 52, 53, 54, and 55 related to alternative work patterns of faculty women.

49. Alternative work patterns, such as job sharing, flex-time and part-time should be established at this institution.
50. For a limited period, professional persons who have heavy family responsibilities should have the opportunity to assume a reduced load temporarily, and to return to full-time status when their schedules permit.
51. Provision should be made, on a limited basis, for those who wish to teach regularly on a part-time basis to enjoy many of the rewards and benefits which accrue to regular faculty status.
52. Regular part-time faculty should be willing to undergo the same critical professional evaluation accorded their full-time colleagues, and should be prepared to contribute time and energy in such areas as counseling, working on faculty committees, and maintaining of office hours.
53. A special, but limited category of part-time faculty should be created, who after the expiration of a stipulated probationary period, should be eligible for the full range of faculty benefits, such as: leave, promotion, support for scholarships, tenure, opportunity to participate in decision-making, voting privileges at faculty meetings, retirement and other fringe benefits.
54. Regular faculty members should be eligible to assume a reduced teaching load for a specified period in order to accommodate family responsibilities and to have the probationary period extended accordingly.
55. In some instances, regular, but less than full-time faculty members should be eligible to enjoy professional titles in accordance with their abilities as teachers and scholars and should have the benefit of equitable standards for notification, pay scales, fringe benefits, and opportunities for community service.

Comparisons of the two groups' responses (women and men faculty) and college responses (University College and the College of Business) to each category of items on the attitude survey were then conducted. Double-classification analysis of variance was the statistical procedure used, because it allowed this researcher to classify the data according to women and men faculty, and University College and the College of Business. It also enabled this researcher to determine differences due to the combination of these two classifications, which did not appear when either sex or college were considered separately.⁹ This statistical procedure was used to test the null hypotheses for the questions:

1. No significant differences exist between the expressed attitudes and opinions of women and men faculty members with regard to Categories 1 through 15 on the attitude survey.

2. No significant differences exist between the expressed attitudes and opinions of respondents in University College and the College of Business with regard to Categories 1 through 15 on the attitude survey.

⁹Robert K. Young and Donald J. Veldman, Introductory Statistics for the Behavioral Sciences (New York: Holt, Rinehart and Winston, 1965), p. 299.

3. No significant differences exist due to the combination of the expressed attitudes and opinions of women and men faculty members and the expressed attitudes and opinions of respondents of University College and respondents of the College of Business, which do not appear when either is considered separately.

The data are presented in both written and chart form in Chapter 4.

CHAPTER 4

PRESENTATION AND ANALYSIS OF THE DATA

The purpose of this study was to investigate current attitudes toward faculty women in higher education. To obtain data, a survey of opinions and attitudes of selected faculty women and faculty men was carried out during the fall of 1978. Results of the survey have provided some answers to questions posed earlier in the study, which were formulated to facilitate identification of certain significant factors which might influence the general attitude of other faculty members toward faculty women in academe.

Chapter 2 was a review of selected related literature. This review of literature was divided into three broad categories: (1) research on the history of women faculty in higher education, (2) research on present trends and opportunities for faculty women in higher education, and (3) other research concerned with employment and advancement of faculty women in higher education that had some influence on the design of the present study.

In the third chapter, the methods of the study were described. Included in this chapter were the definition of the procedures for obtaining the data and the analysis.

Major Hypotheses

The attitudes and opinions of female and male faculty members toward female faculty members in selected departments of two colleges at Michigan State University were determined by testing the following hypotheses:

Hypothesis I

H₀: There is no difference between the Department of American Thought and Language of University College and five departments in the College of Business, including Business Law and Office Education, Hotel and Restaurant Management, Management, Marketing and Transportation, and Economics for the dependent variables:

- a) Category 1. Employment opportunities for faculty women in higher education.
- b) Category 2. Advancement opportunities for faculty women in higher education--promotion.
- c) Category 3. Advancement opportunities for faculty women in higher education--pay.
- d) Category 4. Advancement opportunities for faculty women in higher education--tenure.
- e) Category 5. Advancement opportunities for faculty women in higher education--career development.
- f) Category 6. Advancement opportunities for faculty women in higher education--summary.

- g) Category 7. Personality characteristics of faculty women in higher education.
- h) Category 8. Job mobility of faculty women in higher education.
- i) Category 9. Teaching effectiveness of faculty women in higher education.
- j) Category 10. Research and other scholarly writing of faculty women in higher education.
- k) Category 11. Contributions to profession of faculty women in higher education.
- l) Category 12. Acceptance by associates of faculty women in higher education.
- m) Category 13. Use of full potential of faculty women in higher education.
- n) Category 14. Job satisfaction of faculty women in higher education.
- o) Category 15. Alternative work patterns of faculty women in higher education.

H₁: There is a difference between the two colleges for the dependent variables:

- a) Category 1. Employment opportunities for faculty women in higher education.
- b) Category 2. Advancement opportunities for faculty women in higher education--promotion.
- c) Category 3. Advancement opportunities for faculty women in higher education--pay.
- d) Category 4. Advancement opportunities for faculty women in higher education--tenure.
- e) Category 5. Advancement opportunities for faculty women in higher education--career development.
- f) Category 6. Advancement opportunities for faculty women in higher education--career development.

- g) Category 7. Personality characteristics of faculty women in higher education.
- h) Category 8. Job mobility of faculty women in higher education.
- i) Category 9. Teaching effectiveness of faculty women in higher education.
- j) Category 10. Research and other scholarly writing of faculty women in higher education.
- k) Category 11. Contributions to profession of faculty women in higher education.
- l) Category 12. Acceptance by associates of faculty women in higher education.
- m) Category 13. Use of full potential of faculty women in higher education.
- n) Category 14. Job satisfaction of faculty women in higher education.
- o) Category 15. Alternative work patterns of faculty women in higher education.

Hypothesis II

H₀: There is no difference between women and men faculty members for the dependent variables:

- a) Category 1. Employment opportunities for faculty women in higher education.
- b) Category 2. Advancement opportunities for faculty women in higher education--promotion.
- c) Category 3. Advancement opportunities for faculty women in higher education--pay.
- d) Category 4. Advancement opportunities for faculty women in higher education--tenure.
- e) Category 5. Advancement opportunities for faculty women in higher education--career development.
- f) Category 6. Advancement opportunities for faculty women in higher education--summary.

- g) Category 7. Personality characteristics of faculty women in higher education.
- h) Category 8. Job mobility of faculty women in higher education.
- i) Category 9. Teaching effectiveness of faculty women in higher education.
- j) Category 10. Research and other scholarly writing of faculty women in higher education.
- k) Category 11. Contributions to profession of faculty women in higher education.
- l) Category 12. Acceptance by associates of faculty women in higher education.
- m) Category 13. Use of full potential of faculty women in higher education.
- n) Category 14. Job satisfaction of faculty women in higher education.
- o) Category 15. Alternative work patterns of faculty women in higher education.

H_1 : There is a difference between women and men faculty members for the dependent variables:

- a) Category 1. Employment opportunities for faculty women in higher education.
- b) Category 2. Advancement opportunities for faculty women in higher education--promotion.
- c) Category 3. Advancement opportunities for faculty women in higher education--pay.
- d) Category 4. Advancement opportunities for faculty women in higher education--tenure.
- e) Category 5. Advancement opportunities for faculty women in higher education--career education.
- f) Category 6. Advancement opportunities for faculty women in higher education--summary.
- g) Category 7. Personality characteristics of faculty women in higher education.

- h) Category 8. Job mobility of faculty women in higher education.
- i) Category 9. Teaching effectiveness of faculty women in higher education.
- j) Category 10. Research and other scholarly writing of faculty women in higher education.
- k) Category 11. Contributions to profession of faculty women in higher education.
- l) Category 12. Acceptance by associates of faculty women in higher education.
- m) Category 13. Use of full potential of faculty women in higher education.
- n) Category 14. Job satisfaction of faculty women in higher education.
- o) Category 15. Alternative work patterns of faculty women in higher education.

Hypothesis III

H₀: There is no difference between colleges by sex for the dependent variables:

- a) Category 1. Employment opportunities for faculty women in higher education.
- b) Category 2. Advancement opportunities for faculty women in higher education--promotion.
- c) Category 3. Advancement opportunities for faculty women in higher education--pay.
- d) Category 4. Advancement opportunities for faculty women in higher education--tenure.
- e) Category 5. Advancement opportunities for faculty women in higher education--career development.
- f) Category 6. Advancement opportunities for faculty women in higher education--summary.
- g) Category 7. Personality characteristics of faculty women in higher education.

- h) Category 8. Job mobility of faculty women in higher education.
- i) Category 9. Teaching effectiveness of faculty women in higher education.
- j) Category 10. Research and other scholarly writing of faculty women in higher education.
- k) Category 11. Contributions to profession of faculty women in higher education.
- l) Category 12. Acceptance by associates of faculty women in higher education.
- m) Category 13. Use of full potential of faculty women in higher education.
- n) Category 14. Job satisfaction of faculty women in higher education.
- o) Category 15. Alternative work patterns of faculty women in higher education.

H_1 : There is a difference between colleges by sex for the dependent variables:

- a) Category 1. Employment opportunities for faculty women in higher education.
- b) Category 2. Advancement opportunities for faculty women in higher education--promotion.
- c) Category 3. Advancement opportunities for faculty women in higher education--pay.
- d) Category 4. Advancement opportunities for faculty women in higher education--tenure.
- e) Category 5. Advancement opportunities for faculty women in higher education--career development.
- f) Category 6. Advancement opportunities for faculty women in higher education--summary.
- g) Category 7. Personality characteristics of faculty women in higher education.
- h) Category 8. Job mobility of faculty women in higher education.

- i) Category 9. Teaching effectiveness of faculty women in higher education.
- j) Category 10. Research and other scholarly writing of faculty women in higher education.
- k) Category 11. Contributions to profession of faculty women in higher education.
- l) Category 12. Acceptance by associates of faculty women in higher education.
- m) Category 13. Use of full potential of faculty women in higher education.
- n) Category 14. Job satisfaction of faculty women in higher education.
- o) Category 15. Alternative work patterns of faculty women in higher education.

Analysis of the Problems of the Study

The ninety-one items of Part II of the questionnaire were divided into appropriate subgroups. These subgroups and their composite scores were combined into fifteen broad categories. The categories were analyzed to determine divergence among the two groups in the selected departments of the two colleges studied as to attitudes toward faculty women in higher education. For all fifteen categories, two way, college by sex, fixed effects analyses of variance were used to test hypotheses I, II, and III.

Frequency counts for faculty women and men to the following eight items of Part I of the questionnaire were computed:

1. Selected departments
2. Years on faculty
3. Rank
4. Marital status
5. Number of years on the faculty
6. Age
7. Highest degree attained
8. Type of appointment

Part I provided additional information on the respondents that could be helpful in facilitating a better understanding of attitudes toward faculty women in higher education.

Any missing data were ignored.

Profile of Respondents

Thirty-two percent ($N = 42$) of the respondents were women; 68 percent were men ($N = 88$). Women made up a larger percentage of the faculty of the Department of American Thought and Language of University College than of the five departments in the College of Business (46.0 percent and 14.2 percent, respectively). See Table 4. The proportions of males and females surveyed closely matches the corresponding proportions in the identified population. Table 4 provides a summary of the compositions of the faculty members of selected departments in both colleges.

TABLE 4.--Actual Composition of Faculty Members of
Selected Departments in University College and
the College of Business Responding.

Selected Departments	Female Respondents		Male Respondents	
	Number	Percent	Number	Percent
University College				
Department of American Thought and Language	34	46.0	40	54.0
College of Business				
Departments (All except Accounting)	8	14.2	48	86.0
Total	42	38.0	88	68.0

Years on Faculty

Women have fewer years as faculty members of the departments studied than men. Only 9.5 percent of the women have sixteen or more years of duty, compared to 22.7 percent for men. However, 46.5 percent of men have less than nine years service. Thirty and nine tenths percent of the women have less than three years employment in their current departments as compared with 22.7 percent of the men. (See Table 5.)

TABLE 5.--Number of Years on Faculty of Respondents.

Number of Years	Female Respondents		Male Respondents	
	Number	Percent	Number	Percent
0-3	13	30.9	20	22.7
4-8	7	16.7	13	14.8
9-15	18	42.9	30	34.1
16-20	1	2.4	5	5.7
21+	3	7.1	20	22.7
Total	42	100.0	88	100.0

Rank

Sixty-nine percent of the men hold rank of associate or full professor, while only 28 percent of women hold the same rank. Twenty-eight percent of the women hold ranks of lecturer or instructor; only 9 percent of the men hold similar ranks. (See Table 6.)

Marital Status

Both groups have a higher percentage of married faculty members than single faculty members (64.3 percent for married women as compared to 23.8 percent single women; 77.2 percent married men as compared to 20.5 percent in the single category). Table 7 provides percentages.

TABLE 6.--Rank of Respondents.

Academic Rank	Female Respondents		Male Respondents	
	Number	Percent	Number	Percent
Professor	7	16.6	44	50.0
Associate Professor	5	11.9	17	19.3
Assistant Professor	18	42.9	19	21.6
Instructor	11	26.2	8	9.1
Lecturer	1	2.4		
Total	42	100.0	88	100.0

TABLE 7.--Marital Status of Respondents.

Marital Status	Female Respondents		Male Respondents	
	Number	Percent	Number	Percent
Married Once	25	59.5	64	72.7
Married - Remarried	2	4.8	4	4.5
Separated	5	11.9	2	2.3
Single - Never Married	8	19.0	13	14.8
Single - Divorced or Widowed	2	4.8	5	5.7
Total	42	100.0	88	100.0

Number of Years on
the Faculty

Women have fewer years as faculty members than their male counterparts. Twenty-seven and three tenths percent of the men have sixteen or more years duty, compared to only 11.9 percent for women. Fifty-two and four tenths percent of the women, as compared to 38.0 percent of men, have less than nine years service. Thirty-one percent of the women have three years or less employment as compared with 25.0 percent of the men. (See Table 8.)

TABLE 8.--Number of Years on the Faculty in Current Department.

Years in Department	Female Respondents		Male Respondents	
	Number	Percent	Number	Percent
0-3	13	31.0	22	25.0
4-8	9	21.4	12	13.6
9-15	15	35.7	30	34.1
16-20	1	2.4	7	8.0
21+	4	9.5	17	19.3
Total	42	100.0	88	100.0

Age of Respondents

Larger percentages of women than men are under thirty years of age (16.7 percent as compared to 6.8 percent, respectively). Slightly more men than women are over 49 years of age (35.2 percent for men and 31.0 percent for women. (See Table 9.)

TABLE 9.--Age of Respondents.

Age	Female Respondents		Male Respondents	
	Number	Percent	Number	Percent
20-29	7	16.7	6	6.8
30-39	14	33.3	32	36.4
40-49	5	11.9	19	21.6
50-59	8	9.5	19	21.6
60+	4	9.5	12	13.6
Total	42	100.0	88	100.0

Degree Attained of Respondents

Seventy-nine percent of the respondents hold doctorate degrees. Twenty-six percent of those holding doctorate degrees are women compared to 74 percent of

the men. A larger percentage of men respondents than women respondents hold the doctorate degree (85 percent and 64 percent, respectively). (See Table 10.)

TABLE 10.--Highest Degrees Attained by Respondents.

Degree Attained	Female Respondents		Male Respondents	
	Number	Percent	Number	Percent
Doctorate	27	64.3	75	85.2
Master's/MBA	14	33.3	8	9.1
Bachelor's				
Other		2.4	5	5.7
Total	42	100.0	88	100.0

Type of Appointments
of Respondents

More men faculty members (70.5 percent) hold full-time positions with tenure than women faculty members (45.2 percent). A larger percentage of women hold short-term appointments than faculty men (26.2 percent for women as compared to only 9.0 percent for men in this category). (See Table 11.)

TABLE 11.--Type of Appointments of Respondents.

Appointments	Female Respondents		Male Respondents	
	Number	Percent	Number	Percent
Full Time With Tenure	19	45.2	62	70.5
Full Time Without Tenure	12	28.6	18	20.5
Yearly Appointment	2	4.8	7	8.0
Other	9	21.4	1	1.0
Total	42	100.0	88	100.0

Data Relevant to Questions Examined

Data Related to the
Employment of Faculty Women
in Higher Education:
Category 1 (Hypotheses I(a),
II(a) and III(a))

The interaction for sex and college for Category 1 was found to be nonsignificant ($F(1,124) = 2.3652$, $p < .1266$). Here, and throughout the remainder of the results section, the size of all tests will be taken as $= .05$. Since the test for interaction was not significant, the test for a main effect for sex was examined. This study contained unequal cell frequencies; therefore, the effects for college and sex were confounded. After

first controlling for differences in college, the main effect for sex was thus tested and found to be significant ($F(1,124) = 4.6393, p < .0332$). Since the main effect for sex and college were confounded, and because the main effect for sex was found to be significant, thus, the main effect for college was not examined. Sample mean for women faculty members was 18.715, and for men faculty members the sample mean was 17.657.

Close examination of the data revealed that women faculty members were much less in agreement than men faculty members that employment opportunities were equal for faculty women in higher education. While a large majority of women did not believe that employing agents favored employing women better qualified than men as members of the faculty, most men felt that better qualified women are favored. Although both groups did not believe that employing agents tend to think automatically in terms of men when filling a new position on the faculty, women seemed more skeptical than their male counterparts. Neither group felt that higher education institutions should have a greater proportion of men than women on their faculties; however, women are more adamant in their opinion regarding this variable. The results seem to indicate that a significant majority of women faculty members tend to perceive inequities in employment opportunities for faculty women, while men

tend to believe equality in employment opportunities exists for women. Percentages are presented in Appendix F, and analysis of variance results and summarized in Table 12.

TABLE 12.--Summary of Analysis of Variance for Category 1.

Source	df	Mean Square	F	P Less Than
College	1	.40114	.02421	.8767
Sex	1	76.86115	4.63929	.0332
College by Sex	1	39.18559	2.36520	.1266
Within Groups	124	16.56753		
Total	127			

Data Related to the
Advancement of Faculty Women
in Higher Education--
Promotion: Category 2
(Hypotheses I(b), II(b) and
3(b))

The interaction of sex and college for Category 2 was found to be significant ($F(1,126, p < .00342)$). Since there is a significant interaction, the main effects for sex and college cannot be tested. Figure 1 gives a graphic representation of the sample means. From this figure it can be seen that the reactions of respondents cannot be distinguished from the two

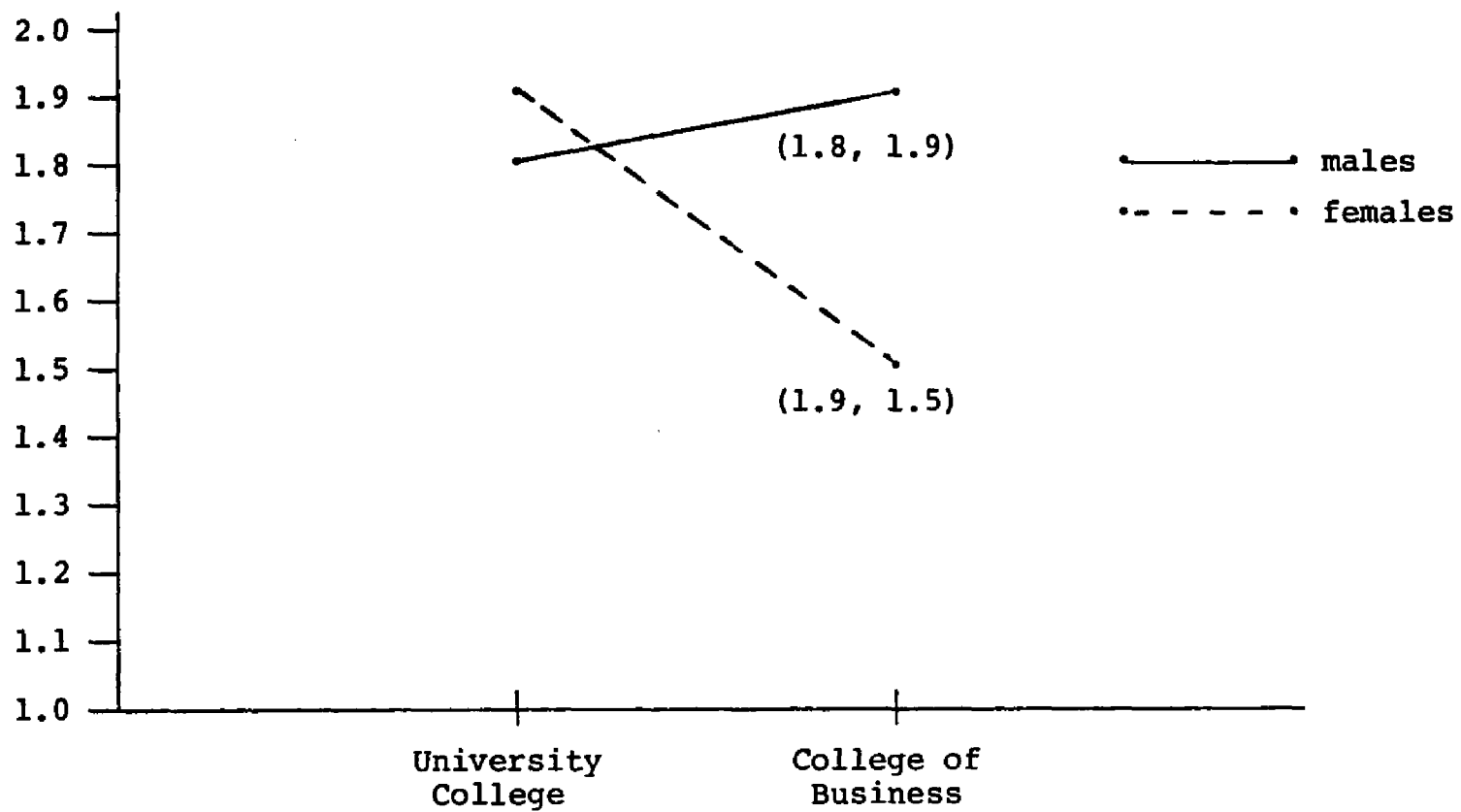


Figure 1.--Sample Means for Category 2.

colleges under examination. As a result, main effects for sex and college could not be examined.

For faculty women, the sample means were 1.91952 and 1.54259; sample means for men faculty were 1.78452 and 1.89554. Sample means for American Thought and Language (ATL) were 1.91952 and 1.78452; for the College of Business sample means were 1.54259 and 1.89554. Grand mean was 1.85173.

Although both groups indicated that faculty women do meet the preparation requirements for promotion to upper ranks, and stay in their positions long enough to earn promotions to upper ranks, ATL women were more adamant in their expressed opinions than were men in both colleges. An overwhelming majority of both groups agreed that there should be a merit system of appointment and promotion in higher education regardless of sex. However, a large majority of women believed that faculty women are often bypassed for promotion, while a large majority of faculty men disagreed with the statement. Both groups felt that faculty women do not have equal opportunity for promotion. Faculty women and men disagreed with one another as to whether or not faculty women attain promotion within the same time period as faculty men in their departments. Women felt that women do not attain promotion on an equal basis with men, while men felt that women are promoted equally.

It may be concluded that it appeared both groups agreed, to a different degree, that there should be a merit system of appointments and promotions in higher education regardless of sex, and that women do meet the necessary requirements for promotion. However, the groups disagreed that equal opportunity for promotion exists for faculty women. Women believed that opportunities for promotion are not equal, while men believed that such opportunities as are presently in existence are equal for women faculty members in academe. Sample means and percentages are presented in Appendices F and G. Analysis of variance results are summarized in Table 13.

TABLE 13.--Summary of Analysis of Variance for Category 2.

Source	df	Mean Square	F	P Less Than
College	1	.00195	.01750	.89495
Sex	1	.01879	.16877	.68190
College by Sex	1	.99091	8.90056	.00342
Within Groups	126	.11133		
Total	129			

Data Related to the
Advancement of Faculty
Women in Higher Education--
Pay: Category 3 (Hypotheses
I(c), II(c), and III(c))

The interaction of sex and college for Category 3 was found to be significant ($F(1,126) = 4.7084$, $p < .0319$). Since there is a significant interaction, the main effects for sex and college cannot be tested. From Figure 2, which gives a pictorial representation of the data, it can be inferred that there is a main effect for college. Sample means for University College were 1.58796 and 1.66250. Sample means for the College of Business were 3.0000 and 3.97917.

Figure 2 clearly shows that college differences were more significant than sex differences. Respondents in University College, more than respondents in the College of Business, agreed that women and men deserve equal pay for equal work in higher education, and that there is a definite relationship between publication and salary increases in the respective departments. Faculty men in University College were more in agreement with their female colleagues in that same college. There was less disagreement in University College that salaries are the same for faculty women and men within rank than there was agreement in the College of Business that the statement was true. Business College respondents were a great deal more adamant in their expressed attitudes

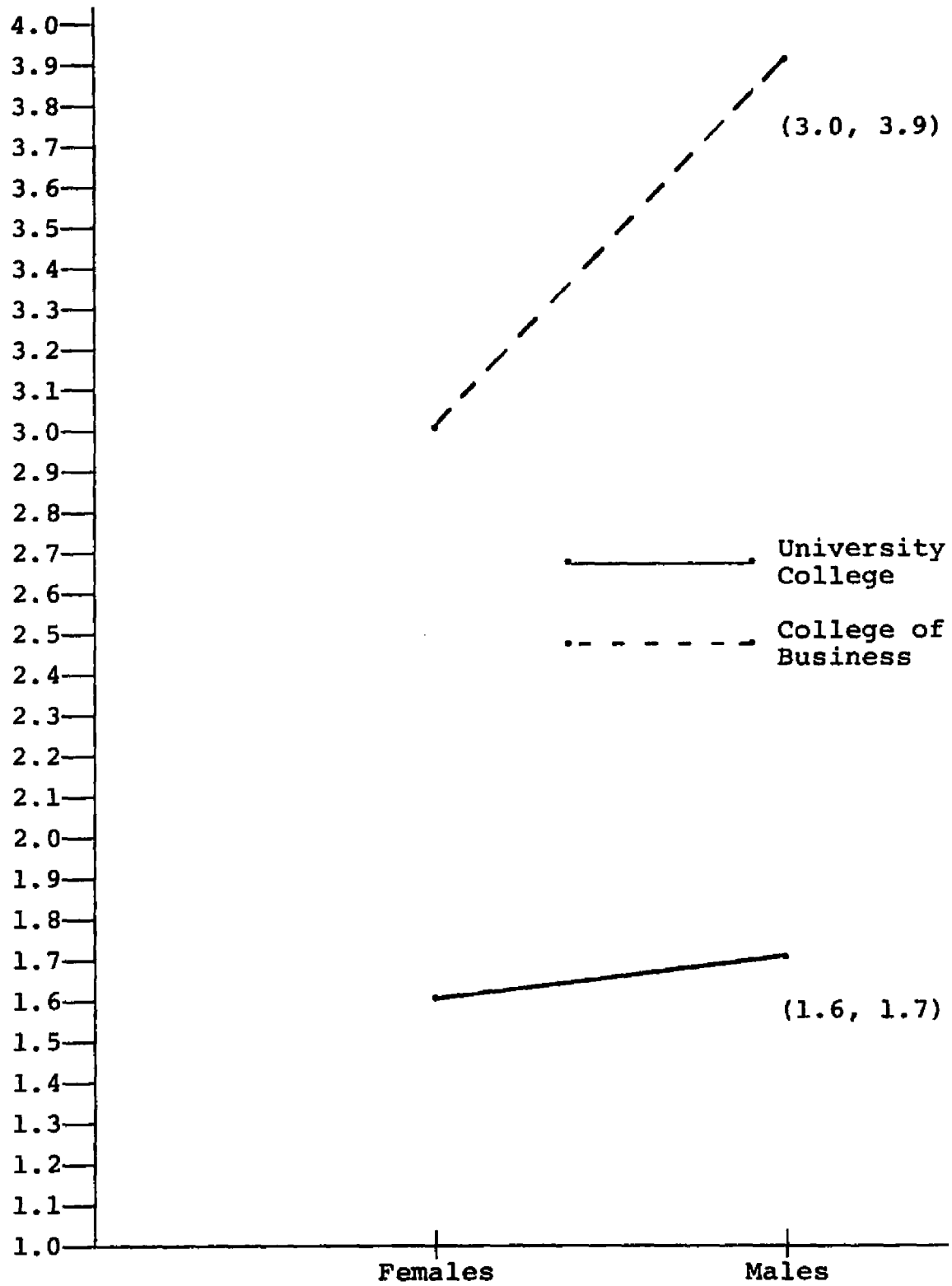


Figure 2.--Sample Means for Category 3.

than were the respondents in University College. The results indicated that in this category type of response depended upon location of respondents in either University College or the College of Business. For example, sample means indicated that respondents in University College were less adamant in their expressed opinions and attitudes than were respondents in the College of Business that women should be paid equally, that present salaries are not equal, and that a faculty member who does not publish finds it difficult to receive salary increases. Sample means and percentages are presented in Appendices F and G. Analysis of variance results are summarized in Table 14.

TABLE 14.--Summary of Analysis of Variance for Category 3.

Source	df	Mean Square	F	P Less Than
College	1	158.85147	214.59980	.00001
Sex	1	1.81282	2.50609	.11591
College by Sex	1	3.40587	4.70835	.03189
Within Groups	126	.72337		
Total	129			

Data Related to the
Advancement of Faculty
Women in Higher Education--
Tenure: Category 4
(Hypotheses I(d), II(d),
and III(d))

The interaction for college and sex was found to be nonsignificant ($F(1,126) = .33749$, $p < .56232$).

Since the test for interaction was not significant, the test for a main effect for sex was examined, and it was found to be nonsignificant ($F(1,126) = .00002$, $p < .99639$). The main effect for college was then examined and was found to be nonsignificant ($F(1,126) = 1.19111$, $p < .27719$). The entire sample mean for this category was 2.13590.

Respondents in both colleges agreed that faculty women have equal likelihood of attaining tenure, that tenure evaluation criteria are the same for faculty women and men in their departments, and that publication pretty much determines tenure decisions. No significant differences were observed in this category. Sample means and percentages are presented in Appendices F and G. Analysis of variance results are summarized in Table 15.

TABLE 15.--Summary of Analysis of Variance for Category 4.

Source	df	Mean Square		P Less Than
College	1	.22612	1.19111	.27719
Sex	1	.00000	.00002	.99639
College by Sex	1	.06407	.33749	.56232
Within Groups	126	.18984		
Total	129			

Data Related to the
Advancement of Faculty Women
in Higher Education--Career
Development: Category 5
(Hypotheses I(d), II(d), and
III(d))

The interaction of sex and college for Category 5 was found to be nonsignificant ($F(1,125) = 1.07992$, $p < .30072$). Since the test for interaction was not significant, the test for a main effect for sex was examined. As a result of the unequal cell frequencies present in the study, the effects for college and sex were confounded. The main effect for sex was thus tested by first controlling for differences in college, and was found to be significant ($F(1,125) = 18.26648$, $p < .00004$). Sample mean for female faculty members was 2.143; sample mean for male faculty members was 2.977.

Comparability of composite sample means of women and men faculty members suggests that although both

groups agreed that career development for women in higher education is a slow process, they did perceive faculty women as sharing sufficient interest in advancement and putting forth effort to attain high positions. Also, both groups (faculty women and faculty men) expressed the opinion that faculty women could attain the administrative position of chairperson of their respective departments. Both groups also believed that additional assignments were made on an equal basis. It may be concluded that female and male faculty members agreed that career development opportunities were equal for women and men in their departments. Sample means and percentages are presented in Appendices F and G. Analysis of variance results are summarized in Table 16.

TABLE 16.--Summary of Analysis of Variance for Category 5.

Source	df	Mean Square	F	P Less Than
College	1	9.93430	18.26648	.00004
Sex	1	12.30278	22.62147	.00001
College by Sex	1	.58732	1.07992	.30072
Within Groups	125	.54385		
Total	128			

Data Related to the
Advancement of Faculty Women
in Higher Education--Summary:
Category 6 (Hypotheses I(f),
II(f), and III(f))

The interaction for college and sex was found to be significant ($F(1,125) = 8.14663$, $p < .00505$). Since there was a significant interaction, the main effects for sex and college cannot be tested. Figure 3 gives a pictorial representation of the data. From this figure it can be inferred that there is a main effect for college. The significance of main effect for college precludes further investigation of main effects for sex and college. University College sample means were 1.91123 and 1.89587. Sample means for the College of Business were 1.95956 and 2.31688.

Both respondents in the College of Business and in University College believed to a different degree that promotion, pay, tenure, and career development were not equal for faculty women. Respondents in University College were more adamant in their opinions and expressed attitudes. Males in the College of Business agreed less than all other groups (males or females in University College or females in the College of Business). It is thus tentatively concluded that the reactions of respondents to the questions concerning advancement of faculty women in higher education depended, to a significant extent, on whether or not they were faculty members in

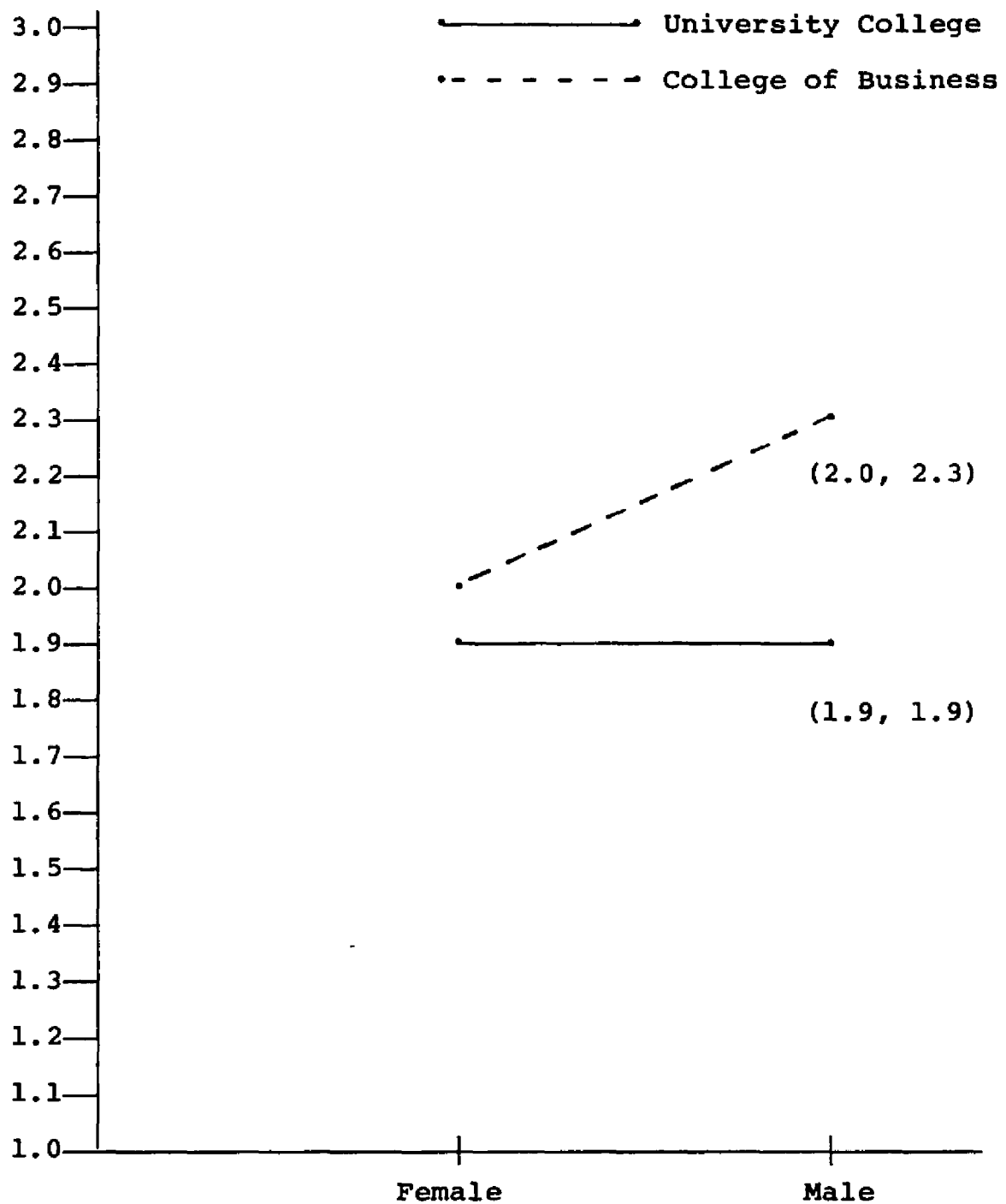


Figure 3.--Sample Means for Category 6.

University College or the College of Business. Sample means and percentages are presented in Appendices F and G. Analysis of variance results are summarized in Table 17.

TABLE 17.--Summary of Analysis of Variance for Category 6.

Source	df	Mean Square	F	P Less Than
College	1	4.35082	61.43161	.00001
Sex	1	.10882	1.50860	.22166
College by Sex	1	.57698	8.14663	.00505
Within Groups	125	.07082		
Total	128			

Data Related to Personality
Characteristics of Faculty
Women in Higher Education:
Category 7 (Hypotheses I(g),
II(g), and III(g))

The interaction for college and sex was found to be nonsignificant ($F(1,126) = 1.09262$, $p < .29789$). Since the test for interaction was not significant, the test for a main effect for sex was examined. It was found to be nonsignificant ($F(1,126) = .77226$, $p < .38119$). The main effect for college was then examined and was found to be nonsignificant ($F(1,126) = 2.83804$,

$p < .09453$. The entire sample mean for this category was 2.43339.

The raw data seem to show a strong trend toward differences in the expressed opinions and attitudes between respondents in University College and respondents in the College of Business. In sharp contrast to the majority of respondents in the College of Business, a majority of respondents in University College indicated that they believed faculty women are as competitive in seeking advancement as faculty men, that faculty women have less of a professional commitment than do faculty men, that faculty women are more fearful than faculty men of conflicts that might endanger their professional career, that faculty women do accept subordination more readily than faculty men, and that faculty women should learn to broaden their career interests more persistently than they have to date.

There were strong trends indicating that the two colleges agreed on several issues in this category. For example, a majority of respondents from both colleges agreed that faculty women do want full equality, even if it does mean equal responsibility. Both groups (University College and the College of Business) agreed that faculty women do assume responsibility in decision-making as rapidly as faculty men, that decision-making is an important part of the work of faculty women, that

they do have equal input into decision-making is an important part of the work of faculty women in higher education. The results of the analysis indicated that significance was not present at the .05 level; however, it did appear that a strong trend toward college differences was observed. Sample means and percentages are presented in Appendices F and G. Analysis of variance results are summarized in Table 18.

TABLE 18.--Summary of Analysis of Variance for Category 7.

Source	df	Mean Square	F	P Less Than
College	1	.62681	2.83804	.09453
Sex	1	.17056	.77226	.38119
College by Sex	1	.24132	1.09262	.29789
Within Groups	126	.22086		
Total	129			

Data Related to Job Mobility
of Faculty Women in Higher
Education: Category 8
(Hypotheses I(h), II(h), and
III(h))

The interaction for college and sex was found to be nonsignificant ($F(1,126) = 3.60240$, $p < .05998$). Since the test for interaction was not significant, the test for a main effect for sex was examined and found to

be nonsignificant ($F(1,126) = 3.23638, p < .07449$).

Next, the main effect for college was examined and found to be significant ($F(1,126) = 7.96600, p < .0054$). For University College, the sample means were 2.08333 and 1.78750; sample means for the College of Business were 1.50000 and 1.68750, respectively.

More respondents in University College indicated that they did not believe that the turnover rate of faculty women is higher than that of faculty men, and that faculty women are less mobile geographically than faculty men, while a slight majority of respondents in the College of Business expressed disagreement. Sample means and percentages are presented in Appendices F and G. Analysis of variance results are summarized in Table 19.

TABLE 19.--Summary of Analysis of Variance for Category 8.

Source	df	Mean Square	F	P Less Than
College	1	2.14995	7.96600	.00554
Sex	1	.87347	3.23638	.07449
College by Sex	1	.97225	3.60240	.05998
Within Groups	126	.26989		
Total	129			

Data Related to Teaching
Effectiveness of Faculty
Women in Higher Education:
Category 9 (Hypotheses I(i),
II(i), and III(i))

The interaction of sex and college for Category 9 was found to be nonsignificant ($F(1,126) = .14770$, $p < .70139$). Since the test for interaction was not significant, the test for a main effect for sex was examined. As a result of the unequal cell frequencies present in the study, the effects for college and sex were confounded. The main effect for sex was tested by first controlling for differences in college, and was found to be significant ($F(1,126) = 14.47348$, $p < .03639$). Since the main effect for sex was significant, the main effect for college was not examined.

For women the sample mean was 2.5635, and for men the sample mean was 2.3504. The results indicated that a majority of both groups (faculty women and faculty men) disagreed, to a different degree, that faculty women are more dedicated to teaching, and more responsive to students than faculty men with more faculty men than women expressing more adamant disagreement. Both groups, however, overwhelmingly agreed that faculty women have equal opportunity for student supervision. Sample means and percentages are presented in Appendices F and G. Analysis of variance results are summarized in Table 20.

TABLE 20.--Summary of Analysis of Variance for Category 9.

Source	df	Mean Square	F	P Less Than
College	1	.18071	.72786	.39520
Sex	1	1.11064	4.47348	.03639
College by Sex	1	.03667	.14770	.70139
Within Groups	126	.24827		
Total	129			

Data Related to Research and
Other Scholarly Writing of
Faculty Women in Higher
Education: Category 10
(Hypotheses I(j), II(j),
and III(j))

The interaction for college and sex was found to be nonsignificant ($F(1,126) = .00020$, $p < .98881$).

After it was found that the test for a main effect for sex was examined and found to be nonsignificant

($F(1,126) = .59802$, $p < .44078$). The main effect for college was examined and found to be nonsignificant

($F(1,126) = .62914$, $p < .42916$).

The entire sample mean for Category 10 was 2.41795. The results show no differences in the expressed opinions and attitudes of the two groups in their indication that faculty women do not publish less than faculty men, that faculty women have equal research possibilities, and that they have equal opportunity for

placement of journal articles. Sample means and percentages are presented in Appendices F and G. Analysis of variance results are summarized in Table 21.

TABLE 21.--Summary of Analysis of Variance for Category 10.

Source	df	Mean Square	F	P Less Than
College	1	.13935	.69214	.42916
Sex	1	.13246	.59802	.44078
College by Sex	1	.00004	.00020	.98881
Within Groups	126	.22150		
Total	129			

Data Related to Contributions
to Profession of Faculty
Women in Higher Education:
Category 11 (Hypotheses I(k),
II(k), and III(k))

The interaction of sex and college for Category 11 was found to be nonsignificant ($F(1,123) = 2.5189$, $p < .11505$). Since the test for interaction was not significant, the test for a main effect for sex was examined and was found to be nonsignificant ($F(1,123) = .73519$, $p < .39287$). Next, the main effect for college was examined and found to be significant ($F(1,123) = 4.68970$, $p < .03227$).

For University College, the sample means were 2.09444 and 1.96709. Sample means for the College of Business were 1.74444 and 1.90326. Results indicated that a majority of both groups (women and men faculty members in both colleges) believed that faculty women put in their share of work and often work more than the normal scheduled hours. They also felt that women share equally in departmental and professional activities. For example, it is believed by both groups that women do not serve on prestigious committees more than their male colleagues, but that they do share equally on important departmental committees, are encouraged to seek offices in professional organizations, and are equally provided with funds to attend conferences. Sample means and percentages are presented in Appendices F and G. Analysis of variance results are summarized in Table 22.

TABLE 22.--Summary of Analysis of Variance for Category 11.

Source	df	Mean Square	F	P Less Than
College	1	.63048	4.68970	.03227
Sex	1	.09884	.73519	.39287
College by Sex	1	.33864	2.51891	.11505
Within Groups	125	.13444		
Total	126			

Data Related to Acceptance
by Associates of Faculty
Women in Higher Education:
Category 12 (Hypotheses
I(1), II(1), and III(1))

The interaction for college and sex was found to be nonsignificant ($F(1,125) = .01623, p < .89884$). After it was found that the test for interaction was not significant, the test for a main effect for sex was examined. It was found to be nonsignificant ($F(1,125) = .18096, p < .67126$). Following next, the main effect for college was examined and found to be significant ($F(1,125) = 15.09145, p < .0016$). For University College, the sample means were 2.36111 and 2.37520. For the College of Business, the sample means were 2.48009 and 2.50630.

The results indicated that respondents in both colleges agreed, to a different degree, that faculty women are regarded favorably by their colleagues, that faculty women feel that co-workers make them feel an important part of the department, that faculty women have equal opportunity to interact with colleagues, and that faculty women usually take opportunities for socializing. A small majority of women agreed to the above statements, while a large majority of men expressed agreement.

While a majority of faculty men disagreed, a majority of faculty women agreed that faculty women are

taken less seriously than faculty men when sent out to represent the institution; that faculty women, more often than men, are asked patronizing questions or comments; and, faculty women, more often than men, often hear hostile questions or comments. Faculty women were more adamant in their expressed agreement than were faculty men in their disagreement. Respondents in neither college believed that faculty women are less responsive to their colleagues than faculty men, or faculty women do not feel that co-workers make them feel an important part of the department. Sample means and percentages are presented in Appendices F and G. Analysis of variance results are summarized in Table 23.

TABLE 23.--Summary of Analysis of Variance for Category 12.

Source	df	Mean Square	F	P Less Than
College	1	.56744	15.09145	.00016
Sex	1	.00680	.18096	.67126
College by Sex	1	.00061	.01623	.89884
Within Groups	125	.03760		
Total	128			

Data Related to Use of Full
Potential of Faculty Women
in Higher Education:
Category 13 (Hypotheses
I(m), II(m), and III(m))

The interaction for college and sex was found to be nonsignificant ($F(1,126) = .16041, p < .68946$). Once it was found that the test for interaction was not significant, the test for a main effect for sex was examined. It was found to be nonsignificant ($F(1,125) = .15060, p < .69861$). Next, the main effect for college was examined and found to be nonsignificant ($F(1,126) = 3.35363, p < .06942$). The entire sample mean for Category 13 was 2.49462.

The results indicated that there was no difference in the expressed opinions and attitudes of the two groups (women and men faculty members) with both groups agreeing that the exploration of the potential of women in higher education has been neglected, and that sex discrimination in employment practice is an important issue for faculty women. Sample means and percentages are presented in Appendices F and G. Analysis of variance results are summarized in Table 24.

TABLE 24.--Summary of Analysis of Variance for Category 13.

Source	df	Mean Square	F	P Less Than
College	1	.39753	3.35363	.06942
Sex	1	.01785	.15060	.69861
College by Sex	1	.01901	.16041	.68946
Within Groups	126	.11854		
Total	126			

Data Related to the Job
Satisfaction of Faculty
Women in Higher Education:
Category 14 (Hypotheses
I(n), II(n), and 3(n))

The interaction of sex and college for Category 14 was found to be nonsignificant ($F(1,123) = .00903$, $p < .92443$). Since the test for interaction was not significant, the test for a main effect for sex was examined. This study contained unequal cell frequencies; therefore, the effects for college and sex were confounded. After first controlling for differences in colleges, the main effect for sex was thus tested and found to be significant ($F(1,123) = 11.67538$, $p < .00086$). Since the main effect for sex and college was confounded, and because the main effect for sex was found to be significant, the main effect for college was not examined. Sample mean for women faculty members was

1.6071, and for men faculty members the sample mean was 1.1919.

Results showed that both groups (women and men faculty members) overwhelmingly indicated that it is important for faculty women to be satisfied with their jobs, and that support from department chairpersons has fostered job satisfaction in their respective departments.

In contrast to the beliefs of faculty men, most faculty women did not believe that faculty women are satisfied with their jobs. A large majority of faculty men agreed that achievement of present rank in their department within a reasonable time period has attributed, in part, to job satisfaction, while a smaller majority of faculty women agreed with this statement. Sample means and percentages are presented in Appendices F and G. Analysis of variance results are summarized in Table 25.

Data Related to Alternative
Work Patterns for Faculty
Women in Higher Education:
Category 15 (Hypotheses I(o),
II(o), and III(o))

The interaction for college and sex was found to be nonsignificant ($F(1,123) = .26689$, $p < .60636$). After finding that the test for interaction was not significant, this researcher examined the test for a main

TABLE 25.--Summary of Analysis of Variance for Category
14.

Source	df	Mean Square	F	P Less Than
College	1	2.09491	4.98450	.02738
Sex	1	4.90699	11.67538	.00086
College by Sex	1	.00380	.00903	.92443
Within Groups	123	.42029		
Total	126			

effect for sex, which was found to be nonsignificant ($F(1,123) = .92313$, $p < .33854$). Next, the main effect for college was examined and found to be nonsignificant ($F(1,123) = .92719$, $p < .33748$). The entire sample mean for this category was 2.91245.

The results indicated that both groups agreed that alternative work patterns such as job-sharing, flex-time and part-time should be established; that professional persons with heavy responsibilities should have the opportunity to assume a reduced load temporarily; that part-time faculty should enjoy many of the rewards and benefits which accrue to regular faculty status; and that regular part-time faculty members should be evaluated. Sample means and percentages are presented in Appendices F and G. Analysis of variance results are summarized in Table 26.

TABLE 26.--Summary of Analysis of Variance for Category 15.

Source	df	Mean Square	F	P Less Than
College	1	.15224	.92719	.33748
Sex	1	.15157	.92313	.33854
College by Sex	1	.04382	.26689	.60636
Within Groups	123	.16420		
Total	126			

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The major purpose of this study was to investigate current attitudes and opinions of faculty women and faculty men toward faculty women in higher education in order to facilitate the identification of certain significant factors which might influence the general attitude of other faculty members toward faculty women in academe.

The subjects of this study consisted of the faculty women and men in selected departments of University College and the College of Business at Michigan State University during the academic year 1978-79. In University College, the Department of American Thought and Language was surveyed. In the College of Business, five departments were surveyed, including Business Law and Office Education, Hotel and Restaurant Management, Management, Marketing and Transportation, and Economics. The survey data were obtained during the fall of 1979. A modified version of the data gathering device developed by researchers and based on opinions and assumptions

found in the literature related to the thesis topic was used for this study.

Results of the survey were used to test the hypotheses posed in Chapters 1 and 4: There is no significant difference of expressed opinions and attitudes of (1) selected departments of University College and the College of Business, (2) faculty women and faculty men, and (3) college by sex with regard to employment and advancement opportunities, teaching effectiveness, production of research and other scholarly writing, contributions to profession, acceptance by associates, use of full potential, job satisfaction, and alternative work patterns of women faculty members in higher education.

Summary of the Findings of the Study

A summary of the findings of the study is presented in Table 27.

Employment Opportunities

Significant differences in opinions and attitudes were reported between faculty women and faculty men with regard to equal employment opportunities for faculty women in higher education.

In sharp contrast to the opinions of the majority of faculty men, a significant majority of faculty

TABLE 27.--Summary of the Findings of the Study.

Category	College				Sex			
	University College	College of Business	Difference	Sig.	Women	Men	Difference	Sig.
1. Employment	17.7	17.6	.1	N.S.	18.7	17.1	1.6	Sig.
2. Advancement--Promotion	1.8	1.9	.1	N.S.	1.9	1.8	.1	N.S.
3. Advancement--Pay	1.6	3.9	2.3	Sig.	1.8	2.9	1.1	N.S.
4. Advancement--Tenure	2.2	2.1	.1	N.S.	2.2	2.1	.1	N.S.
5. Advancement--Career	2.5	3.0	.5	Sig.	2.1	3.0	.9	Sig.
6. Advancement--Summary	1.9	2.3	.4	Sig.	1.9	2.1	.2	N.S.
7. Personality Characteristics	2.4	2.5	.1	N.S.	2.4	2.5	.1	N.S.
8. Job Mobility	1.9	1.7	.2	Sig.	2.6	1.7	.9	N.S.
9. Teaching Effectiveness	2.5	2.4	.1	N.S.	2.6	2.4	.2	Sig.
10. Personality and Other Scholarly Writing	2.4	2.5	.1	N.S.	2.4	2.5	.1	N.S.
11. Contributions to the Profession	2.0	1.9	.1	Sig.	2.1	1.9	.2	N.S.
12. Acceptance by Associates	2.4	2.5	.1	Sig.	2.4	2.5	.1	N.S.
13. Full Potential	2.5	2.4	.1	N.S.	2.5	2.5	0	N.S.
14. Job Satisfaction	1.9	2.1	.2	Sig.	1.7	2.1	.4	Sig.
15. Alternative Work Patterns	2.9	3.0	.1	N.S.	2.9	3.0	.1	N.S.

women indicated that employment opportunities are not equal for female faculty members. While both groups felt that employing agents do not think automatically in terms of men when filling a new position on the faculty, only a slight majority of women held their belief as opposed to a large majority of men. Also, both women and men faculty members agreed that institutions should not have a greater proportion of men than women on their faculties, with women disapproving more adamantly than their male colleagues.

Most faculty women, as opposed to most faculty men, believed that, when faced with a choice between hiring a woman or a man for a faculty position, most employing agents would opt for the man, even if less qualified than the woman candidate.

Advancement Opportunities

Significant differences in opinions and attitudes were reported between faculty women and faculty men in two of the four categories relating to equal advancement opportunities for faculty women in higher education.

Promotion

The two groups expressed no significant differences of opinion, with a majority of both indicating

that there should be a merit system of appointment and promotion in higher education regardless of sex.

Both groups agreed that faculty women meet preparation requirements for promotion, and that they do stay in their ranks long enough to earn promotions. However, although the groups agreed that women do not have equal opportunity for promotions, men believed that there is less inequality, while women were more adamant in their beliefs that promotion differentials favored men.

Pay

Significant differences in opinions were reported between the two groups (University College and the College of Business) in terms of equal pay for faculty women in higher education.

Both groups felt that women should be paid equally; however, responses across the two colleges indicated that a significantly larger majority of faculty members in University College than faculty members in the College of Business expressed the opinion that equal pay, regardless of sex, should be the prevailing practice. Male respondents in both colleges reported that salaries were the same for both sexes within rank, while women in both colleges believed that salaries were not equal. As a result, the data indicated

that significantly more faculty members in University College viewed the salary question more as one of equality. Faculty responses across the two colleges differed in terms of the perceived relationship between salary and publication, with most women and fewer faculty men in University College indicating a high correlation between salary and publication, as opposed to their colleagues in the College of Business.

Tenure

No significant differences in opinions were reported between faculty women and men with regard to equal opportunity for tenure of female faculty members in higher education.

Both groups agreed that there is no difference in tenure evaluation criteria for women or men faculty members, that faculty women have equal opportunity for attaining tenure, and that number of publications directly affects tenure decisions.

Career Development

Significant differences in opinions were reported between faculty women and faculty men in terms of equal opportunity for career development of faculty women in higher education.

A majority of both groups (women and men faculty members) indicated that advancement of women is a slow

process. However, a significantly large majority of women, as opposed to men, indicated advancement was slower for faculty women. Both groups felt that women do put forth adequate effort to earn advancement, however. While a large majority of men and of women indicated that it would be appropriate for a woman to head their respective departments, a significantly larger majority of women than men expressed this viewpoint.

Personality Characteristics

The two groups expressed no significant differences of opinion with regard to personality characteristics of faculty women.

Female and male faculty members both agreed that faculty women have as much professional commitment as faculty men. Both agreed that, not only is decision-making an important part of the work of faculty women, but also faculty women do have equal input into decision-making responsibilities as readily as their male colleagues. Both groups agreed that faculty women want full equality, even if it does mean equal responsibility.

The two groups disagreed, however, not to a significant degree, on a number of personality characteristics. While the majority of male faculty members disagreed, most women believed that female faculty

members are not as competitive in seeking advancement as faculty men, that faculty women accept subordination more readily than faculty men, that faculty women are more fearful than faculty men of conflicts that might endanger their professional status, and, finally, that faculty women should learn to broaden their career interests more persistently than they have to date.

Job Mobility

Respondents from the two colleges expressed significant differences of opinion with respect to job mobility of faculty women in higher education.

More faculty members from University College, in contrast to the College of Business, believed that the turnover rate of faculty women is higher than that of faculty men, and that women are less mobile geographically than faculty men.

Teaching Effectiveness

There were significant differences of expressed opinion between the two groups in the category relating to teaching effectiveness of faculty women in higher education.

Although a large majority of both groups (faculty women and faculty men) did not consider faculty women to be more dedicated to teaching, or more responsive to students than faculty men and that faculty women

are not prevented from being effective teachers as a result of cultural attitudes of students and of men colleagues, faculty men were considerably more adamant in their beliefs concerning these issues than were faculty women. Both groups overwhelmingly agreed that faculty women have equal opportunity for student supervision.

Research and Other Scholarly Writing

The two groups expressed a lack of significant differences with regard to this category.

A large majority of both groups believed that faculty women do not publish less than faculty men, that faculty women have equal research possibilities, and they have equal opportunity for placement of journal articles.

Contributions to Profession

Significant differences in responses were reported between respondents in University College and the College of Business in relation to faculty women's contributions to the profession.

Although both groups agreed that faculty women often work more than the normal scheduled hours, responses from University College were significantly larger and more adamant than responses from the College of Business.

The majority of both groups (University College and College of Business) indicated that faculty women have equal participation in departmental and professional activities with the College of Business expressing slightly stronger agreement. Although both groups agreed that faculty women serve equally on departmental committees, the groups did not feel that women served as often on prestigious committees as faculty men.

Both groups indicated that they believed faculty women were encouraged by their colleagues to seek offices in professional organizations on an equal basis with male faculty members.

Acceptance by Associates

There were significant differences of expressed opinion between respondents in University College and respondents in the College of Business concerning this category.

The two groups expressed significant differences of opinion, with a large majority of respondents from University College indicating agreement that faculty women are not taken as seriously as faculty men when sent out to represent the university, and a majority of respondents from the College of Business expressing disagreement with the statement.

Both groups believed that faculty women are as responsive to their colleagues as faculty men, with respondents in the College of Business more adamant in their agreement.

A small majority of faculty members from University College and a larger majority of their colleagues from the College of Business indicated that they believed that not only do faculty women have equal opportunity to interact with their colleagues, but also they feel co-workers do make them feel an important part of their respective departments.

By sharp contrast, however, the two groups expressed significant differences of opinion when asked whether faculty women believe that faculty men patronize them, or show hostility toward them. A large majority of faculty members in University College believed that faculty women, more often than men, are asked patronizing questions or comments, as opposed to a smaller majority of faculty members in the College of Business who indicated disagreement. Respondents in University College were more adamant in their agreement, however, than were respondents in the College of Business in their disagreement. More members of University College than members in the College of Business believed that faculty women, more often than men, often hear hostile questions or comments. A smaller majority of respondents

from University College expressed agreement, while a significantly larger majority of faculty members from the College of Business expressed disagreement.

Both groups felt that women faculty members usually take opportunities for socializing.

Use of Full Potential

Both groups expressed no significant differences of opinion with regard to use of full potential of faculty women in higher education.

A very large majority of faculty women and men agreed that faculty women who wish to develop their potential do not have adequate opportunity to do so, and that the exploration of the potential of women in higher education has been neglected. In both instances, the male majority was larger and more adamant.

A majority of both faculty women and faculty men believed sex discrimination in employment practice to be an important issue for faculty women. Also, both groups agreed that faculty women feel discriminated against in their jobs because of sex, with the female majority more adamant in their opinion.

Although both groups felt that faculty women are not discriminated against because of their political views about the women's movement, and that faculty women feel it is important to express their views about the

women's movement where they work, the expressed opinion of the male majority was considerably greater than that of females and more adamant.

Job Satisfaction

Significant differences in opinion were reported between faculty women and faculty men across colleges with regard to job satisfaction of faculty women in higher education.

Both groups indicated that it is important for faculty women to be satisfied with their jobs; however, the two groups expressed significant disagreement in their opinion as to whether women are indeed satisfied with their jobs or not. A significant majority of women believed that women are not satisfied with their jobs, while men believed the opposite to be true. Also, respondents in the College of Business believed that women are satisfied with their jobs, as opposed to the majority of respondents in University College who indicated that they did not believe that women have job satisfaction.

Both groups agreed that support from the department chairperson has fostered job satisfaction, and that job satisfaction is attributed, at least in part, to the fact that rank was achieved within a reasonable time. With regard to the relationship between rank and job

satisfaction, significantly more men than women expressed agreement.

Alternative Work Patterns

The two groups expressed no significant differences of opinion with regard to alternative work patterns of faculty women in higher education.

A majority of both groups indicated that alternative work patterns such as job sharing, flex-time and part-time should be established throughout the institution. Both groups also agreed that, for a limited period, professional persons with heavy responsibilities should have the opportunity to assume a reduced load temporarily and to return to full-time status when their schedules permit. Both groups agreed that provision should be made, on a limited basis, for those who wish to teach regularly on a part-time basis to enjoy many of the rewards and benefits which accrue to regular faculty status. In both instances, the female majority was larger and more adamant.

The two groups expressed no differences of opinion, agreeing that a special, but limited category of part-time faculty should be created, who after the expiration of a stipulated probationary period should be eligible for the full range of faculty benefits, such as: leave, promotion, support for scholarships, tenure,

opportunity to participate in decision-making, voting privileges at faculty meetings, and retirement and other fringe benefits.

The two groups expressed no differences of opinion, with an overwhelming majority of faculty women and a large majority of faculty men agreeing that, in some instances, regular, but less than full-time faculty members should be eligible to enjoy professional titles in accordance with their abilities as teachers and scholars and should have the benefit of equitable standards for notification, pay scales, fringe benefits, and opportunities for community service.

The two groups also agreed that regular, part-time faculty should be willing to undergo the same critical professional evaluation accorded their full-time colleagues and should make a contribution to such areas as counseling, working on committees, and maintaining office hours.

Conclusions

The findings of this study revealed significant differences in opinion reported between faculty women and faculty men on ten of the fifteen categories of the attitude survey. Although faculty women and faculty men expressed no significant differences in their expressed attitudes and opinions with regard to faculty women in

higher education in terms of tenure, personality characteristics, research and other scholarly writing, use of full potential, and alternative work patterns, significant proportions differed in their beliefs with regard to employment opportunities, promotion, pay, career development, job mobility, teaching effectiveness, contributions to the profession, acceptance by associates, and job satisfaction.

In sharp contrast to their male colleagues, faculty women did not believe that employment and advancement opportunities were equal in higher education. For example, they believed that hiring differentials, as well as rank and salary differentials favored men.

Specific contrasts between opinions and attitudes of males and females were also evident on questions about career development. Women tended to believe that inequities existed in the advancement process and that, for women, the process was slower than it was for men.

These results are not surprising as the literature reveals that over the past decade women have attempted to document discriminatory employment policies and practices. For example, Rossi expanded and updated a review of numerous reports that examined attitudes toward academic women for sixty-six colleges and universities. She analyzed factors considered prime

attributes of status including institutional participation rate, rank, and administrative activities.

Commenting on the contribution of these studies, Robinson concluded that:

Probably their greatest contribution is the consistent documentation of sex discrimination against faculty women on the nine dimensions of status summarized in this review.¹

The findings of the present study also seem to follow the general contentions of more recent research which has been conducted analyzing specific dimensions of barriers faced by faculty women. For example, Young examined obstacles to faculty women's career development possibilities within colleges and universities and concluded that women are restricted by comparison with their male colleagues. They are more likely to be hired at a lower rank, remain at this rank longer, and be paid a lower salary.²

The data indicated that women were fairly adamant in their expressed opinion that their professional commitment was as strong as their male counterparts. Although they did admit that they don't believe they are as geographically mobile as men; however, they

¹Rossi, "Discrimination and Demography Restrict Opportunities," p. 78.

²Young, op. cit., pp. 41-42.

don't believe also that their turnover rate is higher than that of men.

It was expected that women would not see themselves as geographically mobile as men based on cultural influences, myths, and outright confusion. Investigators, however, have indicated a relationship between career success and geographical mobility. For example, Bradley and Silverleaf examined the relationship between promotion prospects for faculty women and such factors as geographical mobility and concluded that a definite disadvantage in loss of promotion to faculty women was the relative lack of mobility. The researchers maintained in their findings that:

Geographical mobility was frequently mentioned confirming the fact that married women are often unable to make strategic moves in the quest for high status appointments, but may have to move following their husbands even when this may be detrimental to their own career prospects.³

The findings showed fairly consistent agreement between faculty women and faculty men across colleges that faculty women are no more effective as teachers than faculty men; however, men were more adamant in their insistence of no sex differences in this category.

³Judy Bradley and Jane Silverleaf, "Women Teachers in Further Education," Educational Research 22 (November 1979):19.

While men reported that they believed that faculty women feel accepted and supported by male colleagues, women, on the other hand, disagreed. Women indicated that they did not think they were taken seriously when sent out to represent the university, and they believed that their male colleagues, too often, tended to patronize them and to make hostile comments about them.

Similarly, the data indicated that men faculty members tended to believe that women were more satisfied with their positions than were the expressed opinions of women faculty members. The majority of faculty men felt that, on the whole, women were satisfied with their jobs; however, women indicated that they were not satisfied with their jobs, although they were satisfied with certain aspects of their jobs, such as the relationship they have had with their department chairperson.

In one sense, the findings seem to substantiate arguments of investigators found in the literature; in another sense, the findings fail to go deeply into arguments raised by other researchers. Although more specific charges such as unequal treatment of faculty women in terms of hiring policies, duties, salary and promotion are common features of investigations, and supported by the findings of this study, general underrepresentation of women at the faculty level based on

unfavorable attitudes toward them also represents the main thrust of numerous reports, which go beyond the scope of the present findings, but which may be important in understanding the nature of the findings of this investigation. "A recurring theme," cites Feldman, "is that many of the difficulties that academic women face may be largely the result of a tradition of anti-female discriminatory behavior within academia."⁴ Graham and Strommer pointed out obstacles that have limited the full participation of women teachers in colleges and universities. In spite of evidence to the contrary, persistent myths surround women's academic career goals. For example, one such myth is the assumption that women are not as committed to their careers as their male counterparts. However, as Graham indicated, research by Astin in 1967 revealed that 91 percent of women doctoral recipients in the mid-50s were employed seven years later.⁵ Graham noted that another myth serving to impede faculty women's professional growth in academe is the idea that women make good teachers but inadequate researchers, the latter being indispensable to a successful academic career. According to Graham,

⁴Saul D. Feldman, Escape From the Doll's House: Women in Graduate Education (New York: McGraw-Hill, 1974), p. 9.

⁵Graham, op. cit., p. 166.

the evidence indicates that women do, in fact, publish. In spite of heavy teaching loads and other handicaps, they still manage to become productive scholars.⁶

Important concepts raised by Strommer involved issues of women's careers, myths about working women, and faculty women's roles relative to women students. Focus on the issue of careers for women has been primarily on getting jobs for them. Strommer pointed out that in the American Scholar Demos reminded us that the primary goal of the early feminists was not at first about the right to vote, but about the right of women to work outside the home. Their aim was to expose the myth of domesticity and all the rhetoric on woman-in-the-home which early feminists despised. Myths about working women needed to be dispelled, Strommer suggested, particularly those that stressed that women do not need or do not want careers. Providing figures from the Women's Bureau, Strommer showed that one-tenth of all women remain single and work for most of their lives. Of married women, one-tenth do not have children and these women work for most of their lives. Reminding us that career aspirations are largely socially derived and are rapidly changing, Strommer also argued that "statements about the inherent talents or

⁶Ibid.

nature of women are likely to be disguised discrimination."⁷ She concluded by suggesting that, as models, faculty women must be concerned with all aspects of education.⁸

As a whole, then, the unfinished story of women's struggle to achieve equality of educational and professional opportunity has been based, at least in part, on their ability, first and foremost, to be able to identify and then to be able to counteract prevailing attitudes detrimental to their progress, and on their efforts and determination to capitalize on those factors favorable to their educational and professional advancement.

The results of the present findings investigating the attitudes and opinions of faculty women and men in selected departments of University College and the College of Business toward faculty women at Michigan State University appear to substantiate the findings of other investigators, such as Crim, which indicated that, on the whole, faculty women and faculty men perceive faculty women as dedicated, competent, responsive and

⁷Strommer, op. cit., p. 85.

⁸Ibid.

⁹Crim, op. cit., p. 82.

effective teachers and professionals in higher education.⁹

Recommendations

On the basis of the findings of this study, the following recommendations are made:

1. A better instrument for determining attitudes and opinions among the faculty in higher education should be developed.

2. A review of all part-time and full-time policies and procedures should be conducted by the Affirmative Action Officer with a view toward recommending programs that would eliminate any possibility of discriminatory practices.

3. Preservice and inservice training should be provided for educational personnel with special emphasis on programs and activities designed to provide equal employment and career opportunities for faculty members in higher education.

4. Research, development, and educational activities should be implemented to advance professional equity.

5. Efforts should continue to be made to introduce policy and structural changes to promote increased involvement of women in academic life at all levels and in all fields.

6. Efforts should be made to identify and eliminate artificial barriers and attitudes which effectively prevent many women from seeking university employment. For example:

- (a) Employment interviews and applications should not discriminate through inquiries into, or assumptions about, actual or potential marital status, fertility plans, or living arrangements.
- (b) All other restrictive hiring policies and practices should be abolished.

7. Each department should have a national roster of women talent with enough information about each woman's accomplishments and special interests to make it useful to people who want to identify women for jobs and for advisory posts.

8. Efforts should be made to insure equitable staffing patterns which should include an intensive search for competent females, particularly in traditionally male fields, such as business and engineering.

9. Efforts should be made to insure that, once hired, women should receive equal pay for equal rank and receive promotions on an equal basis with male faculty members.

10. Every effort should be made to appoint qualified women to faculty and administrative positions and to university governing boards. Perhaps the most important single factor in creating an environment that

is as hospitable to the aspirations of women as to men is to appoint women in significant numbers to senior faculty and administrative posts in the university.

11. Maternity leaves should be replaced by parenthood and family sick leaves available to both women and men. Working schedules should provide sufficient flexibility to accommodate child care and home demands equally available to women and men.

12. There should be a review of the part-time employment policies and a consideration of the possibility of structuring part-time employment in a more flexible manner and in such a way as to make certain fringe benefits and tenure available to the part-time faculty.

Suggestions for Further Study

On the basis of this study, the following suggestions for further study are made:

1. Consideration should be given to the conduct of more research on women in higher education. This field is a new area for research and is practically untapped.

2. Consideration should be given to the conduct of research into traditionally male dominated fields, such as business and engineering.

3. A more intensive study of the determination of actual personality differences between women and men, in other departments at this university and in other institutions of higher learning throughout the state, should be conducted to provide more precise information.

4. Consideration should be given to the conduct of research on minority women in higher education.

5. A longitudinal study should be conducted on each of the following topics, which would provide information to complement this present study:

- (a) A study of attitudes of faculty men toward faculty women in higher education.
- (b) A study of attitudes of faculty men and women toward minority faculty in higher education.
- (c) Differences in job mobility between women and men faculty members in higher education.
- (d) A comparative study of personality characteristics of women and men faculty members in higher education.
- (e) A comparative study of secular and non-secular institutions of higher education.

6. A study of faculty comparison by employment status, sex and salary for both full-time and part-time staff should be conducted.

APPENDICES

APPENDIX A

FIRST LETTER OF TRANSMITTAL

MICHIGAN STATE UNIVERSITY
College of Education
Department of Administration and
Higher Education
East Lansing, Michigan 48823
August 1979

Tel. (517) 332-1471

Dear Faculty Member:

I am a candidate for the Ph.D. in the College of Education, Department of Administration and Higher Education at Michigan State University. I am also an instructor in the College of Arts and Letters. The title of my dissertation is "An Assessment of Attitudes Toward Women Faculty at Michigan State University."

The dissertation will shed light not only on the attitudes and perceptions of women faculty members toward their professional careers, but also the attitudes and perceptions of significant male members of the profession toward female faculty members at Michigan State University. The sample consists of selective male and female faculty members at Michigan State University. Some of the data I need requires answers to the questions in the enclosed questionnaire. It seeks information about your academic background, employment history, current activities, some of your past accomplishments, and attitudes about your job and about women faculty members at this institution. The data collected for this study will be strictly confidential and your anonymity is guaranteed.

One of the main reasons that I am interested in studying female faculty is because as a black faculty member I am keenly aware of the problems faced by women and minorities in institutions of higher education throughout this country and abroad. I am also aware of the fact that not many systematic studies have been done on the assessment of attitudes of men toward female faculty members or the attitudes of women toward other female faculty members. Through my dissertation I am seeking to contribute to the research literature on female faculty in higher education and to understand more fully institutional, and psychological barriers, as well as social constraints and how they affect female faculty members. The findings also should provide information that can lead to improved conditions for women faculty in academe.

Therefore, I request that you fill out the enclosed questionnaire. Only about 25 minutes of your time is needed. A self-addressed envelope is enclosed for your convenience. Presently, I am on sabbatical without pay as I have a deadline to complete this portion of my work, and my funds are limited; therefore, I will be grateful if you will obviate the necessity of a follow-up by responding at your earliest convenience. Needless to say, your cooperation is sincerely appreciated. If you have any questions you may call me at 332-1471.

Sincerely,



James N. Nevels
Ph.D. candidate
Department of Administration and Higher Education
College of Education
Michigan State University

P.S. The I.D. number on the questionnaire is for follow-up purposes only. Your name and the entire list will be seen only by me and will be destroyed upon completion of the study.

APPENDIX B

SECOND LETTER OF TRANSMITTAL

MICHIGAN STATE UNIVERSITY
Department of Administration
and Higher Education
College of Education
East Lansing, Michigan 48823
September, 1979

Tel. (517) 332-1471

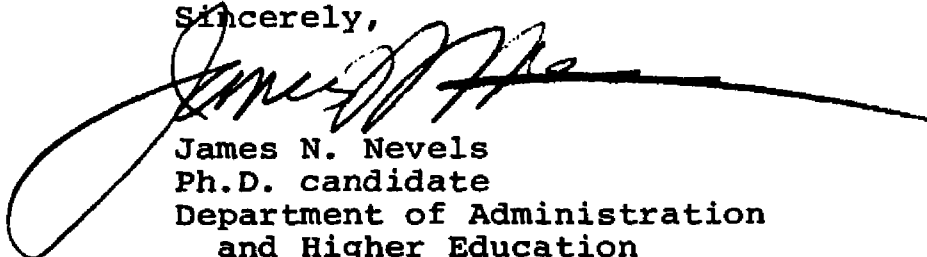
Dear Colleague:

Approximately three weeks ago, I mailed you a questionnaire regarding your opinion toward faculty women in higher education. Undoubtly, because of numerous other demands upon your time and attention, you have found it difficult to return the form.

The response to the questionnaire has been enthusiastic thus far. I would like to stress that individual responses will not be reported in the study and urge your confidential participation. I am enclosing another copy of the questionnaire sent to you earlier in the event that you have mislaid the original. You will also find another business reply envelope for your convenience.

Won't you please take some of your time to complete the questionnaire and return it to me at your earliest convenience. I would be most grateful for your support.

Sincerely,

A large, stylized handwritten signature in dark ink, likely belonging to James N. Nevels, is written over the typed name and address.

James N. Nevels
Ph.D. candidate
Department of Administration
and Higher Education
College of Education
Michigan State University

APPENDIX C

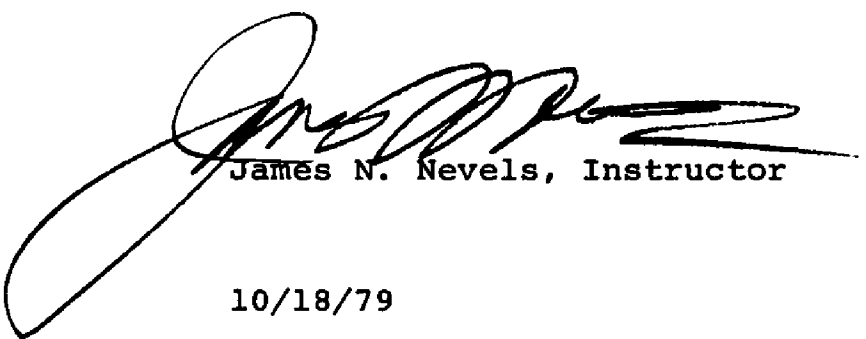
THIRD LETTER OF TRANSMITTAL

JUST A REMINDER!!!

Please remember to complete and return the forms which were sent to you about three weeks ago.

Your return, along with those already received, will improve the validity, reliability, and statistical accuracy of this study of attitudes toward faculty in higher education. Your opinions need to be included in the findings that can help us in the analysis and improvement of professional opportunities for faculty women.

Your efforts will be appreciated. Please take a few minutes from your busy schedule to complete and return the questionnaire enclosed.



James N. Nevels, Instructor

10/18/79

APPENDIX D

QUESTIONNAIRE

I.D. Number _____

OPINIONNAIRE FOR ATTITUDINAL STUDY
OF FACULTY WOMEN IN HIGHER
EDUCATION AT MICHIGAN
STATE UNIVERSITY

This opinionnaire has been designed to learn the opinions and attitudes toward the employment and advancement of faculty women. In addition, it seeks general information about certain differences which exist between men and women faculty members. Please feel free to express candidly your attitudes, and your opinion of the attitudes of others even if you cannot present evidence to substantiate your views.

Part I. -- Please answer every item.

1. How many years have you been employed at your present university? _____
2. What department are you in? _____
3. How many years have you been teaching in your current department? _____
4. What other positions do you hold within the department? (please check all that apply)
 - a. department executive officer _____
 - b. associate head, division head _____
 - c. chairperson standing committee _____
 - d. specify which standing committee _____
 - e. please list the positions that you hold outside your department (e.g. chairperson of a university committee, assistant dean, etc.) _____
5. What is your present rank? (please check one) ☐ instructor ☐ assistant professor ☐ associate professor
☐ professor ☐ distinguished/named professorship ☐ lecturer ☐ no ranks designated ☐ other _____
6. How long have you held your present rank? _____
7. What kind of appointment do you hold? ☐ full-time with tenure ☐ full-time without tenure
☐ yearly appointment (soft money) ☐ acting ☐ visiting ☐ other _____
8. (If tenured) in what year were you awarded tenure? _____
9. What is your age? _____
10. Sex: ☐ female ☐ male
11. What is your ethnic origin? ☐ Caucasian ☐ Black/Afro-American ☐ other _____
12. What is your marital status? ☐ married (only once) ☐ married (remarried) ☐ separated
☐ single (never married) ☐ single (divorced) ☐ widowed _____
13. How many dependent children do you have? _____
14. What academic degrees do you hold?

Degree	Major Field	Institution	Date Received
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
15. To what professional organizations do you belong? _____
16. By what institution other than your present one have you been employed? (please begin with the most recent and list them in order)

Institution	Years Employed
_____	_____
_____	_____
_____	_____

Comments: _____

Thank you.

Part II.--Please respond to all statements by placing an "x" in the space provided which comes closest to expressing your viewpoint. Mark your response to correspond to the following symbols: SA - strongly agree, A - agree, D - disagree, SD - strongly disagree.

	SA	A	D	SD
17. Employment opportunities are equal for men and women in higher education at your institution.	_____	_____	_____	_____
18. Few faculty women meet the preparation requirements for promotion to upper ranks.	_____	_____	_____	_____
19. Women and men deserve equal pay for equal work in higher education.	_____	_____	_____	_____
20. Faculty women are more dedicated to teaching than faculty men.	_____	_____	_____	_____
21. Employing agents favor employing women better qualified than men, as members of the faculty.	_____	_____	_____	_____
22. Few faculty women stay in their positions long enough to earn promotions to upper ranks.	_____	_____	_____	_____
23. Employing agents tend to think automatically in terms of men when filling a new position on the faculty.	_____	_____	_____	_____
24. Faculty women are not as competitive in seeking advancements as faculty men.	_____	_____	_____	_____
25. Faculty women have less of a professional commitment than do faculty men.	_____	_____	_____	_____
26. Faculty women who wish to develop their potential have adequate opportunity to do so.	_____	_____	_____	_____
27. There should be a merit system of appointment and promotion in higher education, regardless of sex.	_____	_____	_____	_____
28. In general, advancement for women in higher education is a slow process.	_____	_____	_____	_____
29. Faculty women do not assume responsibility in decision-making as rapidly as faculty men.	_____	_____	_____	_____
30. Faculty women are taken less seriously than faculty men when sent out to represent the institution.	_____	_____	_____	_____
31. Higher education institutions should have a greater proportion of men than women on their faculties.	_____	_____	_____	_____
32. The turnover rate of faculty women is higher than that of faculty men.	_____	_____	_____	_____
33. Faculty women accept subordination more readily than do faculty men.	_____	_____	_____	_____
34. Few faculty women produce the research required for promotion to upper ranks.	_____	_____	_____	_____
35. Faculty women are less mobile geographically than faculty men.	_____	_____	_____	_____
36. The exploration of the potential of women in higher education has been neglected.	_____	_____	_____	_____
37. Faculty women are often bypassed for promotion.	_____	_____	_____	_____
38. Faculty women do want full equality, even if it does mean equal responsibility.	_____	_____	_____	_____
39. Faculty women are regarded favorably by their colleagues.	_____	_____	_____	_____
40. Few faculty women are sufficiently interested to put forth the effort to earn advancement to upper ranks.	_____	_____	_____	_____
41. Faculty women are more responsive to students than faculty men.	_____	_____	_____	_____
42. Faculty women publish less than faculty men.	_____	_____	_____	_____
43. Faculty women should learn to broaden their career interests more persistently than they have to date.	_____	_____	_____	_____
44. Faculty women are more fearful than faculty men of conflict that might endanger their professional status.	_____	_____	_____	_____
45. Part-time faculty members do not give sufficient thought and time to their profession.	_____	_____	_____	_____
46. Faculty women have higher rates of sick leave than faculty men.	_____	_____	_____	_____
47. Faculty women are less responsive to their colleagues than faculty men.	_____	_____	_____	_____
48. Cultural attitudes of men colleagues and of students prevent a woman in higher education from being an effective teacher.	_____	_____	_____	_____

Part III.--Flexible Work Patterns. Please respond to all statements by placing an 'x' in the space provided.

	SA	A	D	SD
49. Alternative work patterns such as job sharing, flex-time and part-time should be established at this institution.	___	___	___	___
50. For a limited period, professional persons who have heavy family responsibilities should have the opportunity to assume a reduced load temporarily, and to return to full-time status when their schedules permit.	___	___	___	___
51. Provision should be made, on a limited basis, for those who wish to teach regularly on a part-time basis to enjoy many of the rewards and benefits which accrue to regular faculty status.	___	___	___	___
52. Regular part-time faculty should be willing to undergo the same critical professional evaluation accorded their full-time colleagues, and should be prepared to contribute time and energy in such areas as counseling, working on faculty committees, and maintaining of office hours.	___	___	___	___
53. A special but limited category of part-time faculty should be created, who after the expiration of a stipulated probationary period, should be eligible for the full range of faculty benefits, such as: leave, promotion, support for scholarships, tenure, opportunity to participate in decision-making, voting privileges at faculty meetings, retirement and other fringe benefits.	___	___	___	___
54. Regular faculty members should be eligible to assume a reduced teaching load for a specified period in order to accommodate family responsibilities and to have the probationary period extended accordingly.	___	___	___	___
55. In some instances, regular, but less than full time, faculty members should be eligible to enjoy professional titles in accordance with their abilities as teachers and scholars, and should have the benefit of equitable standards for notification, pay scales, fringe benefits, and opportunities for community service.	___	___	___	___

Part IV.--Please respond to all statements by placing an "x" in the space provided.

56. Faculty women are discriminated against because of their political views about the women's movement.	___	___	___	___
57. Faculty women feel that it is not important to express their views about the women's movement where they work.	___	___	___	___
58. It is (or would be) appropriate for a faculty woman to head my department.	___	___	___	___
59. Faculty women feel that co-workers make them feel an important part of the department.	___	___	___	___
60. Decision-making is an important part of the work of faculty women.	___	___	___	___
61. It is important to faculty women to be able to make decisions about their work.	___	___	___	___
62. Taking everything into account, faculty women are satisfied with their jobs.	___	___	___	___
63. It is important for faculty women to be satisfied with their jobs.	___	___	___	___
64. Faculty women do not feel discriminated against in their job because of sex.	___	___	___	___
65. Sex discrimination in employment practices is an important issue for faculty women.	___	___	___	___
66. Faculty women often work more than the normal scheduled hours.	___	___	___	___
67. Faculty women have equal participation in departmental and professional activities in my department.	___	___	___	___
68. Faculty women serve equally on important committees in my department.	___	___	___	___
69. Faculty women serve more on less prestigious committees than faculty men in my department.	___	___	___	___
70. Faculty women are encouraged to seek offices in professional organizations.	___	___	___	___

Salary, Tenure and Promotion of Faculty Women

71. Faculty women have equal opportunity for promotions.	___	___	___	___
72. Faculty women have equal likelihood of tenure attainment.	___	___	___	___
73. Tenure evaluation criteria are the same for faculty women and men in my department.	___	___	___	___

74. Salaries are the same for faculty women and men within rank. _____
75. Faculty women attain promotion within the same time period as faculty men in my department. _____
76. Faculty women have equal opportunity for additional assignments (summer school, etc.). _____
77. Faculty women have equal opportunity for placement of journal articles. _____
78. Faculty women have opportunities for consulting. _____
79. Faculty women have opportunities for student supervision (advisees). _____
80. Faculty women have equal research possibilities. _____
81. Faculty women have equal input into formal decision-making. _____
82. Faculty women have equal opportunity for attaining funding for conferences. _____
83. Faculty women have equal opportunity to interact with colleagues. _____
84. Faculty women participate in informal decisions. _____
85. Faculty women, more often than men, are asked patronizing questions or comments. _____
86. Faculty women, more often than men, often hear hostile questions or comments. _____
87. Faculty women usually take opportunities for socializing. _____
88. Support from my department chairperson has fostered my job satisfaction in my department. _____
89. I attribute my job satisfaction, in part, to the fact that I have achieved my present rank in my department within a reasonable time period. _____
90. I am not satisfied with my job at present and I attribute this job dissatisfaction (at least in part) to the fact that I have not achieved the academic rank that I feel I deserve within a reasonable time period. _____

For questions 91 to 93, place an "x" in the space provided which comes closest to expressing your viewpoint. Mark your response to correspond to the following symbols: VS - very satisfied, SS - somewhat satisfied, NSD - neither satisfied nor dissatisfied, VS - very satisfied.

VS S NSD SD VD

91. All in all, how satisfied are you with your present job? _____
92. How satisfied are you with the progress you are making towards the goals which you set for yourself in your present position in the department? _____
93. Are you satisfied with your job in light of career expectations? _____

For questions 94 and 95, place an "x" by the following symbol which comes closest to expressing your viewpoint -- E - excellent, G - good, F - fair, P - poor.

E G F P

94. I rate my satisfaction with my current salary in my department. _____
95. I rate the overall faculty salary levels at my university. _____

For questions 96 to 98, place an "x" by the response which comes closest to expressing your viewpoint.

96. I will make a real effort to find a position at another university within the next year.
☐ not at all likely ☐ somewhat likely ☐ very likely
97. If I had my choice of all the jobs in the world I would choose
☐ my present job ☐ another job in the same occupation ☐ a job in another occupation.
98. I get the most satisfaction from ☐ my job ☐ the things I do in my spare time ☐ my family.

In questions 99 and 100 below please respond regarding your attitudes toward your teaching in writing in the spaces below.

99. When you feel exceptionally good about your job, what aspects of the job come to mind?

a. _____

b. _____

c. _____

100. When you feel exceptionally bad about your job, what aspects of the job come to mind?

- a. _____
 b. _____
 c. _____

Publications and Research

A faculty member's publications and research record are usually very important in regard to acquiring tenure, promotion, and salary increases. Questions 101-106 are designed to give information on your publication and research record. In questions 101-103 place an "x" in the space which comes closest to expressing your viewpoint.

101. Do your interests lie primarily in teaching or in research? ☐ very heavily in research
☐ in both, but leaning toward research ☐ in both, but leaning toward teaching ☐ very heavily in teaching
102. How many articles have you published in academic or professional journals in the past three years?
☐ none ☐ 1-2 ☐ 3-4 ☐ 5-10 ☐ 11-20 ☐ more than 20
103. How many books or monographs have you published or edited, alone or in collaboration, in the last three years?
☐ none ☐ 1-2 ☐ 3-4 ☐ 5 or more

In questions 104-106, place an "x" in the space provided which comes closest to expressing your viewpoint. Mark your response to correspond to the following symbols: SA - strongly agree, A - agree, D - disagree, SD - strongly disagree.

	SA	A	D	SD
104. When I was looking for my first job, a faculty member sponsored me and served as my mentor.	_____	_____	_____	_____
105. In my department it is very difficult for a person to achieve tenure if he or she does not publish.	_____	_____	_____	_____
106. In my department it is very difficult for a person to receive significant salary if he or she does not publish.	_____	_____	_____	_____
107. Please list at least three (3) activities in which you supported or felt compelled not to support career opportunities for faculty women. (For example, recruitment, hiring, promotion, tenure, fringe benefits, maternity leave, etc.)

1. _____

2. _____

3. _____

Please add open-ended comments not covered in questionnaire:

Thank you!

APPENDIX E

LIST OF INTERVIEW QUESTIONS

1. "What should be studied in relation to improving the status of women faculty members?"
2. "Are there equal opportunities for employment and advancement of women faculty in your department?"
3. "On what basis are faculty members in your department rewarded and advanced? Is it the same or different in other departments of your college? Are there any sex differences in promotional policies?"
4. "Are potential abilities of faculty women fully utilized in your department?"

APPENDIX F

PERCENTAGE OF RESPONSES

CATEGORY 1.--Data Related to the Employment of Faculty Women (Percent of Responses).

Item Number	Female Respondents				Male Respondents			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
17	7.3	19.5	51.2	22.0	15.1	45.3	32.6	7.0
21	2.9	26.5	58.8	11.8	7.2	40.5	34.8	17.4
23	4.8	42.9	45.2	7.1	3.6	16.9	63.9	15.7
31	4.8	2.4	50.0	42.9	3.5	21.2	49.4	25.9
104	26.8	17.1	31.7	24.4	19.8	23.3	31.4	25.6

CATEGORY 2.--Data Related to Advancement of Faculty Women--Promotion (Percent of Responses).

Item Number	Female Respondents				Male Respondents			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
18	--	12.5	35.0	52.5	8.2	11.8	60.0	20.0
22	--	5.1	46.2	48.7	3.6	16.9	63.9	15.7
27	61.0	29.3	9.8	--	57.6	37.6	2.4	2.4
37	35.9	43.6	20.5	--	3.6	21.7	55.4	19.3
71	2.6	42.1	52.6	2.6	33.3	45.2	16.7	4.8
75	7.9	39.5	50.0	2.6	27.5	66.2	6.3	--

CATEGORY 3.--Data Related to Advancement of Faculty Women--Equal Pay (Percent of Responses).

Item Number	Female Respondents				Male Respondents			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
19	92.9	2.4	2.4	2.4	78.2	18.4	--	3.4
74	5.3	42.1	44.7	7.9	25.6	53.8	17.9	2.6
106	23.7	57.9	13.2	5.3	23.9	50.0	20.5	5.7

CATEGORY 4.--Data Related to Advancement of Faculty Women--Tenure (Percent of Responses).

Item Number	Female Respondents				Male Respondents			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
72	5.3	42.1	50.0	2.6	30.9	45.7	18.5	4.9
73	8.3	72.2	13.9	5.6	39.5	53.5	4.7	2.3
105	23.7	52.6	21.1	2.6	33.0	30.7	29.5	6.8

CATEGORY 5.--Data Related to Advancement of Faculty Women--Career Development
(Percent of Responses).

Item Number	Female Respondents				Male Respondents			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
28	34.1	61.0	4.9	--	7.1	50.6	32.9	9.4
40	2.4	35.7	61.9	--	5.9	9.4	51.8	32.9
58	64.3	35.7	--	--	49.4	43.5	4.7	2.4
76	21.1	63.2	13.2	2.6	38.9	50.7	2.4	--

CATEGORY 7.--Data Related to Personality Characteristics of Faculty Women
(Percent of Responses).

Item Number	Female Respondents				Male Respondents			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
24	2.4	57.1	28.6	11.9	3.6	14.3	57.1	25.0
25	--	2.4	43.9	53.7	1.2	8.3	58.3	32.1
29	4.8	18.1	56.6	18.1	7.2	18.1	56.6	18.1
33	2.4	61.9	28.6	7.1	2.4	25.3	49.4	22.9
38	59.5	35.7	2.4	2.4	36.5	49.4	11.8	2.4
43	13.9	52.8	30.6	2.8	6.5	24.7	55.8	13.0
44	--	54.8	40.5	4.8	8.8	23.8	53.7	13.7
60	22.0	58.5	19.5	--	17.1	69.5	12.2	1.2
61	54.8	45.2	--	--	32.1	63.1	3.6	1.2
81	12.8	46.2	35.9	5.1	31.0	59.5	9.5	--
84	10.0	67.5	17.5	5.0	29.3	54.6	6.1	--

CATEGORY 8.--Data Related to Job Mobility of Faculty Women (Percent of Responses).

Item Number	Female Respondents				Male Respondents			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
32	2.6	18.4	63.2	15.8	7.5	26.2	60.0	6.3
35	9.8	53.7	31.7	4.9	7.4	39.5	42.0	11.1

CATEGORY 9.--Data Related to Teaching Effectiveness of Faculty Women (Percent of Responses).

Item Number	Female Respondents				Male Respondents			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
20	12.5	17.5	55.0	15.0	1.1	5.7	60.9	32.2
41	12.5	27.5	60.0	--	3.6	7.1	59.5	29.8
48	2.4	14.6	46.3	36.6	4.7	4.7	57.6	32.0
79	25.7	71.4	2.9	--	34.6	62.8	2.6	--

CATEGORY 10.--Data Related to Research and Other Scholarly Writing of Faculty Women
(Percent of Responses).

Item Number	Female Respondents				Male Respondents			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
42	--	28.2	56.4	15.4	5.1	20.5	64.1	10.3
77	10.8	62.2	24.3	2.7	34.6	50.5	4.5	--
80	13.2	55.8	21.1	--	31.3	53.9	4.8	--

CATEGORY 11.--Data Related to Contributions to Profession of Faculty Women
(Percent of Responses).

Item Number	Female Respondents				Male Respondents			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
66	43.6	43.6	12.8	--	5.3	50.0	31.6	13.2
67	20.0	45.0	32.5	2.5	39.5	52.3	4.7	3.5
68	22.5	57.5	17.5	2.5	38.8	49.4	8.2	3.5
69	5.1	25.6	53.8	15.4	1.2	5.9	61.2	31.8
70	11.9	54.8	21.4	11.9	25.0	61.2	10.0	3.7
82	11.8	70.6	14.7	2.9	33.7	62.7	3.6	--

CATEGORY 12.--Data Related to Acceptance by Associates of Faculty Women (Percent of Responses).

Item Number	Female Respondents				Male Respondents			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
30	17.5	52.5	27.5	2.5	3.7	31.3	46.2	18.8
39	7.3	46.3	43.9	2.4	17.1	64.6	18.3	--
47	--	2.4	45.2	52.4	--	7.2	69.9	22.9
59	5.6	50.0	44.4	--	12.3	69.9	15.1	2.7
83	10.0	60.0	20.0	10.0	32.1	64.3	3.6	--
85	30.0	50.0	15.0	5.0	7.5	33.7	48.7	10.0
86	21.6	37.8	37.8	2.7	6.3	26.2	57.5	10.0
87	2.9	57.6	29.4	--	3.9	71.4	19.5	5.2

CATEGORY 13.--Data Related to Use of Full Potential of Faculty Women (Percent of Responses).

Item Number	Female Respondents				Male Respondents			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
26	4.8	19.0	61.9	14.3	24.1	52.9	19.5	3.4
36	43.2	48.6	8.1	--	5.9	55.3	29.4	9.4
56	10.0	30.0	57.5	2.5	--	10.7	48.8	49.5
57	--	34.1	58.5	7.3	--	17.9	56.4	25.6
64	2.4	7.1	76.2	14.3	3.9	29.9	60.0	5.2
65	43.9	46.3	7.3	2.4	25.3	57.8	14.5	2.4

CATEGORY 14.--Data Related to Job Satisfaction of Faculty Women (Percent of Responses).

Item Number	Female Respondents				Male Respondents			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
62	5.1	20.5	56.7	7.7	7.7	59.2	31.0	5.6
63	70.0	30.0	--	--	44.6	53.0	2.4	--
88	30.0	50.0	12.5	7.5	27.2	63.0	7.4	2.5
89	10.8	40.5	43.3	5.4	59.5	59.5	21.5	3.8

CATEGORY 15.--Data Related to Alternative Work Patterns of Faculty Women (Percent of Responses).

Item Number	Female Respondents				Male Respondents			
	Strongly Agree	Agree	Disagree	Strongly Disagree	Strongly Agree	Agree	Disagree	Strongly Disagree
49	39.0	39.0	17.1	4.9	28.6	40.5	23.8	7.1
50	45.2	--	9.5	4.7	19.5	54.0	21.8	4.6
51	35.7	50.0	14.3	--	19.0	53.6	21.4	6.0
52	42.9	45.2	9.5	2.4	33.3	50.0	12.5	4.5
53	31.7	43.9	19.5	4.9	15.3	47.1	29.4	8.2
54	41.0	52.5	2.6	--	17.6	57.6	20.0	4.7
55	41.0	56.4	2.6	--	19.0	56.0	17.9	7.1

APPENDIX G

**SAMPLE MEANS: CELL, MARGINAL, AND
GRAND MEANS FOR CATEGORIES 1-15**

CATEGORY 1.--Data Related to Employment of Faculty Women.

Sex	University College	College of Business	Marginal Mean
Women	18.287	21.289	18.716
Men	17.179	17.107	17.141
Marginal Mean	17.704	17.590	

CATEGORY 2.--Data Related to Advancement of Faculty Women--Promotion.

Sex	University College	College of Business	Marginal Mean
Women	1.920	1.543	1.866
Men	1.784	1.896	1.845
Marginal Mean	1.849	1.874	

CATEGORY 3.--Data Related to Advancement of Faculty Women--Pay.

Sex	University College	College of Business	Marginal Mean
Women	1.588	3.000	1.790
Men	1.663	3.980	2.926
Marginal Mean	1.620	3.870	

CATEGORY 4.--Data Related to Advancement of Faculty Women--Tenure.

Sex	University College	College of Business	Marginal Mean
Women	2.185	2.000	2.158
Mean	2.159	2.097	2.136
Marginal Mean	2.159	2.097	

CATEGORY 5.--Data Related to Advancement of Faculty Women--Career Development.

Sex	University College	College of Business	Marginal Mean
Women	2.056	2.667	2.143
Mean	2.850	3.085	2.977
Marginal Mean	2.474	3.038	

CATEGORY 6.--Data Related to Advancement of Faculty Women--Summary.

Sex	University College	College of Business	Marginal Mean
Women	1.912	1.960	1.918
Men	1.896	2.317	2.123
Marginal Mean	1.903	2.276	

CATEGORY 7.--Data Related to Personality Characteristics.

Sex	University College	College of Business	Marginal Mean
Women	2.35	2.27	2.35
Men	2.39	2.55	2.48
Marginal Mean	2.36	2.52	

CATEGORY 8.--Data Related to Job Mobility.

Sex	University College	College of Business	Marginal Mean
Women	2.08	1.46	2.64
Men	1.79	1.69	1.73
Marginal Mean	1.92	1.66	

CATEGORY 9.--Data Related to Teaching Effectiveness of Faculty Women.

Sex	University College	College of Business	Marginal Mean
Women	2.57	2.50	2.56
Men	2.34	2.36	2.35
Marginal Mean	2.45	2.37	

CATEGORY 10.--Data Related to Research and Other Scholarly Writing of Faculty
Women.

Sex	University College	College of Business	Marginal Mean
Women	2.35	2.39	2.36
Men	2.43	2.47	2.47
Marginal Mean	2.39	2.46	

CATEGORY 11.--Data Related to Contributions to Profession of Faculty Women.

Sex	University College	College of Business	Marginal Mean
Women	2.09	1.74	2.14
Men	1.97	1.90	1.93
Marginal Mean	2.03	1.88	

CATEGORY 12.--Data Related to Acceptance by Associates of Faculty Women.

Sex	University College	College of Business	Marginal Mean
Women	2.36	2.48	2.38
Men	2.38	2.51	2.45
Marginal Mean	2.37	2.50	

CATEGORY 13.--Data Related to Use of Full Potential of Faculty Women.

Sex	University College	College of Business	Marginal Mean
Women	2.55	2.50	2.54
Men	2.54	2.42	2.47
Marginal Mean	2.54	2.43	

CATEGORY 14.--Data Related to Job Satisfaction of Faculty Women.

Sex	University College	College of Business	Marginal Mean
Women	1.63	1.75	1.66
Mean	2.09	2.18	2.14
Marginal Mean	1.87	2.13	

CATEGORY 15.--Data Related to Alternative Work Patterns.

Sex	University College	College of Business	Marginal Mean
Women	2.90	3.10	2.94
Men	2.86	2.93	2.90
Marginal Mean	2.88	2.95	

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