SOCIOECONOMIC BACKGROUNDS OF EDUCATORS AND THEIR ATTITUDES TOWARD WOMEN AS ACADEMIC ADMINISTRATORS

DISSERTATION

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The purpose of this study is to determine the relationship, if any, between the socioeconomic backgrounds of educators and their attitudes toward women as academic administrators, including a comparison of the attitudes of male and female educators toward women as administrators.

The population consisted of all full time faculty and administrators in 25 colleges and universities holding membership in the Association for Higher Education (AHE) of North Texas during the 1984/1985 academic year. This group of institutions consists of 10 community/junior colleges and 15 senior colleges and universities.

Data generation was achieved through the administration of a research package mailed to a sample of 300 subjects selected by a proportionate random process from the defined population. The instruments consisted of a modified version of the Women As Managers Scale (WAMS) and the Hollingshead Four Factor Index of Social Status. Useable data from 209 respondents were subjected to multiple regression techniques.

The hypothesis that socioeconomic background of educators will be positively related to attitudes toward women as academic administrators was not upheld. It was however determined that attitudes toward women as administrators are explanable by a combination of job and non-job related variables, with women having more positive attitudes than men.

The findings that 1) younger subjects have more positive attitudes, 2) experience under a female superordinate, generated favorable comments, and 3) educators as a whole had a highly favorable attitude lead to the conclusion that opportunities for advancement of women into adminstrative positions are brighter than often reported. It is suspected that the legislative activities and the feminist movement of the 1960s may have had a positive influence.

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CHAPTER I

INTRODUCTION

The upward organizational mobility of women has been a prime objective among many groups within the larger American society. For example, ten years ago, Silvestri and Kane (23) investigated the affirmative action commitment of postsecondary institutions. Among other conclusions, they stated: "Women's rights groups, black opportunity organizations and governmental agencies themselves have been unable to prevent campus tokenism and government ineptitude" (23, p. 449).

Basic understanding of the forces which impede the progress of women in work settings is essential if efforts aimed at enhancing their upward mobility are to succeed. The access of women into various work organizations, their performance evaluations, and the promotion and reward which they receive have been the subject of much research (6, 7, 8, 10, 12, 14).

Haefner (15, p. 265) has made reference to the finding that business and industry are reluctant to employ or to continue training women for top executive positions. Crino, White and DeSanctis (5) tested the hypothesis that expectations of increasing numbers of women in high status

occupations will lead to progressive deterioration of the prestige and desirability of those occupations.

Halloran (16, p. 406) recognized the importance of occupation to status. He indicated that occupations provide the major channels for rising in social status and that two factors, education and the ability to break through the barriers of class prejudices, are essential ingredients for a low status person to acquire a high status job. He contends that by acquiring skill and education, it is possible to knock on the doors of employers who can unlock future status possibilities (such as higher occupational ranks). The argument is that people of a higher class feel threatened when members of a lower class attempt to penetrate their ranks; hence for the doors to be opened, those in power must accept those who come knocking (16, p. 406).

Johnston, Johnston and Yeakey (17, pp. 310-311) have noted that in an occupational setting, the relationship between males and females is often one of a struggle between the dominant (male) and subordinate (female) group, and that those in power tend to feel that they have a vested interest to protect and hence to maintain the status quo. The conflict is intensified when the economic factor of competition for employment is an issue (17, p. 311).

It has been stated that the socioeconomic position of a person affects his or her chances for education, income,

occupation, marriage, friends and even life expectancy (19, p. 275). While agreeing that occupation is the best single predictor of social status, Miller (19) also notes that education is the basis for entry into many occupations.

Similarly, Nam and Powers (22, p. 1) acknowledge that occupation is not the sole criterion of position within the stratification system in American society. Rather, total social position can be identified in terms of personal reputation, family background, occupation, and education, among others. In what amounts to the same statement, Myers and Bean (21, p. 6) have indicated that the various hierarchically ranked groupings in society, identified by social class, tend to be distinguished from one another, not only in terms of different occupational roles, educational backgrounds, and resources, but also by systematic behavior patterns and styles of life.

The concept of acceptance by those in power is not new. It was stated that the development of social indicators represents an attempt to provide information on individuals, and the distribution of resources including knowledge, working conditions, status and access to power. Yet such criteria reflect the value structure and performance standards of the predominant power groups in society (28, p. 183).

The struggle by women for a more active participation in work organizations has been a hard and protracted one. Over the past two decades, the number of women entering the work force has risen sharply indicating perhaps their increasing rejection of traditional views of appropriate sex-role behavior (25, p. 89). In particular, many women are now seeking full-time employment in previously masculine dominated occupations. According to Fairhurst and Snavely (11, p. 292), the liberation movement of the 1970's spawned large numbers of women and blacks entering white male dominated professions.

Despite this insurgence of women into the work force, the number attaining positions of authority and greater responsibility has been small, if not disappointing (12, p. 3). Terborg et al. (25, pp. 89-90) have stated that the integration of women into positions of authority and responsibility has achieved limited success. They suggest that a more probable explanation for the differential treatment of and resistance toward women may be found in the existence of pervasive and persistent sex-role stereotypes. Fairhurst and Snavely (11, p. 292), however, contend that the political atmosphere of some environments can preclude success for newcomers subject to tokenism.

The management of academic organizations in the United States has been a traditionally male domain. In a study of

men and women presidents of postsecondary educational institutions, Amend (1, pp. 34-35) reported that among 3,142 institutions, only 186 (6%) were headed by women. Bowker, Hinkle and Worner (3) have studied the administrative aspirations of male and female faculty in land grant colleges. They reported that top level administrative positions are primarily held by men. Of the women who become administrators, most tend to be in staff positions rather than top level decision-making ones. Reviewing a 1978 survey of 106 land grant colleges and universities, Bowker et al. (3, pp. 64-65) determined that of the 13,638 administrative positions, 2905 (21.3%) were held by women. Among these women about 33% were in line positions compared to 51.5% of the male administrators. As one moves up the administrative hierarchy, the number of women decreases. In 1978, only three female were presidents or chancellors in land grant institutions (3, p. 64).

In light of the large number of women with requisite qualifications and, given the legislative and regulatory activities of the federal government aimed at expanding access for under-represented populations, Amend (1, p. 2) has raised the questions: "Why so few? Why are men almost always chosen to fill the top executive positions by college boards of trustees?"

Frequently, the justifications offered for the low representation of women center around discrimination (9,

pp. 254-255) or lack of interest on the part of females (3, p. 65). Fulton examined the impact of the search committee and determined that search committees frequently recommended women, but administrators failed to follow through with appointment (12, p. 3).

Much of the research uncovering instances of sex discrimination has assumed that the cause of such discrimination is an underlying sex-role stereotypical attitude held by decision-makers (4, pp. 742-743). Tidball (27, p. 373) maintained that college and university environments are nonsupportive of women. In turn, Dinerman (9, p. 262) recognized the existence of intense rivalry in academia for those prizes and prestige symbols which are available, such as promotions, committee appointments, graduate seminar assignments, et cetera. She stated: "This highly competitive professional and social millieu, together with a strong tendency for conformity, produces an environment that is especially hostile to women in any professional role" (p. 262). Andruskiw and Howes (2) state that organizational homogeneity, in itself a pervasive theme and based on a belief that heterogeneity in managers and executives is harmful to an organization's stability and survival, may account for many of the discriminatory organizational practices. In this context they seem to argue that a woman's visibility in an organization is more often related to her sex than her competence (p. 478).

Given these contentions, and in view of the notion that entry into future status opportunity requires acceptance by those in power (16, p. 406), it is possible to explore the relationship between socioeconomic backgrounds (parental social class) and educator attitudes toward women as administrators in higher education. It is the intent of this study to investigate this relationship, and therefore to explore if some values and attitudes associated with particular socioeconomic backgrounds are more conducive to support women's upward aspirations than those associated with other socioeconomic backgrounds. It has been argued that schools display a tendency to preserve existing roles, structures, and institutions, and to perpetuate a dysfunctional status quo, especially in relation to women (26, p. 370).

The preponderance of studies related to the participation of women in work organizations has been in business and industry. Relatively fewer similar studies have been directed toward higher educational organizations. This is unfortunate given that education as a profession has traditionally employed more women than most other fields. In order to explain the poor representation of women among the upper echelons, organizational researchers have focused on such factors as motivation or interest (3), stereotypic attitudes (25), and overt discrimination (6, 9).

Statement of the Problem

The problem of this study is the relationship between the socioeconomic backgrounds of educators and their attitudes toward women as academic administrators.

Purposes of the Study

The specific purposes of this study are as follows:

1. To determine the relationship, if any, between the socioeconomic backgrounds of educators and their attitudes toward women as administrators in higher education;
2. To compare the attitudes of (a) female versus male faculty and (b) female versus male administrators toward women as academic administrators;
3. To explore the extent to which stereotypic attitudes among educators determine women's participation in academic administration;
4. To determine whether certain attitudes are anchored to specific socioeconomic levels;
5. To determine what attitudes are more conducive to women's upward mobility aspirations.

Hypotheses

To carry out the purposes of this study, the following hypotheses were tested.

1. Males and females of higher socioeconomic back-

grounds will show more positive attitude toward women as academic administrators than will males and females of lower socioeconomic backgrounds.

2. Female faculty will have a more positive attitude toward women as academic administrators than will male faculty.
3. Female administrators will have a more positive attitude toward women as academic administrators than will male administrators.
4. Male administrators will have a more positive attitude toward women as academic administrators than will male faculty.
5. There will be a positive relationship between academic rank and attitudes toward women as academic administrators.
6. There will be a positive relationship between years of experience and educator attitude toward women as academic administrators.
7. There will be a positive relationship between experience under a female superordinate and educator attitudes toward women as academic administrators.

In addition to the above hypotheses, the variables will also be scrutinized for other fruitful interaction effects. For example, the interaction of socioeconomic background and

mother's work history will be examined. The interaction of respondent's sex and mother's work history will also be examined.

Background and Significance of the Study

Concern has often been voiced regarding the social and economic status of women. In particular, the upward mobility of women vis-a-vis their male counterparts within organizations has been a prime concern. A great deal of research has focused on such issues as who gets hired into the organization and at what entry salary, or who gets promoted to a position of authority and responsibility.

Research which has sought answers to these issues has concentrated on the private sector. Many of the findings indicate that the differential treatment of persons is frequently based on social characteristics rather than job related factors such as ability and skill (14, 24, 25).

Terborg and Ilgen (24) contend that full utilization of women in the work force will not be successful, until emphasis is placed on psychological factors relating stereotypic attitudes to future behavior. To overcome occupational sex-segregation, both men and women must transgress the boundaries traditionally defined for their sex (18, p. 111).

Wiley and Eskilson (30) have studied sex-role constraints in the corporation and found support for the

status-effects explanation of sex differences in managerial evaluations and rewards. According to their study, "when the identically acting men and women in our scripts are seen as having equivalent positions, the evaluations of women are still far colder than those of men" (30, p. 9).

Similarly, an interesting research study by Deaux and Emswiller (6) sought explanations of successful performance on sex-linked tasks. The result of their study was a clear indication that equivalent performances by males and females are not explained by the same attributions. In other words, successful performance by a male on a masculine-linked task is attributed to internal factors (ability and skill), whereas the same performance by a female is attributed to external factors such as luck (6, p. 84). Similar results were reported by Garland and Price (14) and by Garland, Hale, and Burnson (13). By implication attempts to reduce bias by training women to develop or adopt masculine managerial traits will not reduce unequal evaluations and reward (30). In fact, it has been suggested that male-female differences in attitude-attribution relationships may be the result of males expecting failure from female managers, while females expect success (13, p. 161). The same results have been reported by Welsh (29, p. 19). It was indicated that "males' perception of females as leaders is somewhat more traditional or conservative than females' perception of that role. This generally more conservative

role definition does apparently influence how males evaluate a woman's performance when she is actually in a leadership role" (29, pp. 21-22).

In academe, studies relating to the status of women, have uncovered evidence of institutional reluctance in the recruitment of females for administrative positions (7, 8, 23). Often when women are hired into administration, they tend to occupy mainly high, visible, token positions because the institution must demonstrate to the outside world its willingness to hire minorities (11, p. 296; 23).

Efforts, to explain the sources of differential access and treatment of men and women in academic administration, have tended to rely on lack of interest, motivation and scarcity of women with high academic ranks (3) and discrimination (9). Moore and Sagaria (19) have indicated that holding a line position is essential for achieving upward mobility toward the college presidency. Yet, the Bowker et al. (3) analyses indicated that the preponderance of women in administrative positions are in staff, nondecision-making positions. This suggests that the upward mobility of women, therefore, may be more constrained than that of men by the type of administrative (staff) positions they frequently hold. Bowker et al. (pp. 78-80) concluded that the low representation of women in line positions in university administration would no longer be justified on

the assumption that women are not as interested as are men in these positions of leadership.

The inference that women lack the qualities, motivation and interest to function effectively at certain job levels has an important implication for education. That implication is that people are created for specific jobs, hence training/learning has no place in determining job performance. But, it is known that educational goals include growth and change in socioeconomic power.

Despite twenty years of economic, legislative and social reforms (Civil Rights Act; Affirmative Action; Executive Orders), which have been undertaken to encourage women's upward mobility, the assimilation of women into management or leadership roles has met with problems (25, 29). Given the current under-representation of women in college and university administration (7, 8), and given that the proportional imbalance can no longer be justified on the assumption of lack of interest (3), it is worthwhile to seek other explanations for improvement.

This study will be significant in that it will attempt to

1. Discover a socioeconomic foundation or rationale for educator attitudes toward women as academic administrators and the interaction of these as a basis for differential treatment of women;

2. Convey a valuable message to those aspiring to academic administrative positions regarding needed improvement and techniques to break through the barriers of socioeconomic class prejudices, and

3. Provide some information which might be useful in drawing up search committees when administrative vacancies are to be filled.

Assumptions

The following assumptions have been made in carrying out this study.

1. Anyone who has the requisite skills and education and who strives to succeed in an organization will ultimately succeed.

2. Men and women are likely to differ in their perceptions about and attitudes toward women as academic administrators and these differences will be associated with socioeconomic status.

3. Responses to the attitude scale truly reflect stable long-held beliefs of respondents and not merely spurious momentary beliefs.

Definition of Terms

The following terms are defined as they pertain to this study:

Attitudes Toward Women - Refers to the disposition which people have for women in administrative or management

positions. It is a behavior representative of feeling or convictions. Liberal minded individuals will show more positive attitude toward women aspiring to attain organizational mobility while conservative stereotypic persons will be more traditional in their attitudes toward women.

Socioeconomic Background - Refers to social class or status of the parents of respondents and is described by a composite score on the education and occupation dimensions of the Hollingshead Four Factor Index of Social Position.

Academic Administrator/Manager - Anyone in higher education who has a decision-making role with regard to personnel matters, instructional and administrative academic matters, and has at least one person reporting to him or her.

Occupational Position - Refers to professorial rank (Full Professor, Associate Professor, Assistant Professor, Instructor) or administrative title (President, Vice President, Dean, Department Chairperson or Director).

Academic Nonmanager - Refers to faculty and staff members in non-managerial positions.

Limitations

The following limitations are recognized in this study:

The study was delimited to the attitudes and socioeconomic backgrounds of educators in 25 colleges and

universities which are members of an academic consortium - The Association for Higher Education of North Texas. The study does not in any way represent the official position or attitudes of these institutions.

This inquiry was guided by one central theme, that of attempting to understand the influence of socioeconomic background on the upward mobility of women in organizations. The frame of reference was higher education in the Northern region of the State of Texas.

Data collected through the administration of a survey instrument were therefore limited by the subjective, if stable, experiences and opinions of respondents. Since, by profession, faculty and administrators are partners in the education tradition, this study was therefore aimed at educators who guide the advancement of knowledge and social cohesion.

Summary

This chapter discussed the problem with which this study is concerned, namely the relationship between the socioeconomic backgrounds of educators and their attitudes toward women as administrators. Chapter II will present a review of related literature, Chapter III contains a description of the methods and procedures of the study, Chapter IV is a presentation of the data, and Chapter V will

discuss and summarize the findings and implications for further research.

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CHAPTER II

REVIEW OF SELECTED RELATED LITERATURE

The last chapter presented the problem and purposes of this study, along with a number of hypotheses to be tested. Similarly, the background and significance of the study as well as the assumptions, limitations and definition of terms were discussed. The present chapter is a review of extant literature concerning the advancement prospects for women along organizational hierarchies. The review focuses on that repository of human wisdom called the higher education, and will center on three developments, namely: a) the Feminist Movement, b) The Equal Opportunity and Affirmative Action Legislation, and c) recent Research on Women in Management.

The past two decades have witnessed mounting interest regarding the status and upward mobility of women in various work settings (11, 17, 35, 38, 56). Specific topics which have been explored include the effects of sex on selection and treatment of managerial talents (32, 33, 50, 51), job satisfaction (8, 55), and performance evaluation (11, 33, 34).

This growing interest was triggered partly by the flury of legislative activities of the 1960s and 1970s and partly

by the so-called feminist movement of the same era, both of which spawned large numbers of women and minorities entering white male-dominated professions, thus forcing a recognition of the desires of many women for participation in activities beyond their traditional family roles (15, 52). Howe (23) has noted that the chief effect of the women's movement on higher education has been its impact on the lives of academic women. She predicts: "this effect will continue to be felt among new generations, increasing numbers of women will be motivated to organize their lives around careers and egalitarian relationships, and many women will choose nontraditional careers" (23, p. 169).

Along similar lines, Rosen and Jerdee (34) stated that in the future it seems reasonable to assume that women might be employed in almost any managerial position currently staffed by men. Contributing to this expected change in aspiration of women are such factors as changing cultural values concerning the role of women in society, federal legislation banning sex discrimination in employment practices, increasing opportunities for women to acquire advanced education and training, and the increasing number of young women with work experience and no small children (34, p. 44). Brown (6) noted that predictions of shortages in managerial talents during the 1960s have led to increased pressures for greater participation of women in leadership roles during the 1970s (p. 595).

Despite these optimistic predictions, the struggles by women to penetrate occupational barriers and rise to higher levels of organizational hierarchy have been difficult. Fulton (17, p. 3) and Bowker, Hinkle and Worner (4, p. 64) have observed that in colleges and universities, minorities and women are not well represented either at the highest faculty ranks or in positions of administrative leadership. According to Fulton (17), a recent survey of over 3,000 college and university administrators found that 91.8 percent were white, 5.4 percent were black and 2.8 percent were other minorities. Although 20 percent of those surveyed were women, both black and women administrators were concentrated in such positions as head librarian, registrar, and director of financial aids (17, p. 3). This distribution pattern is consistent with the findings reported in a study by Dingerson, Rodman and Wade (12).

Several researchers have focused on the difficulty of integrating women into traditionally male-dominated occupations, especially management and administration (18, 19, 24, 51, 52). Numerous explanations or reasons have been offered for the paucity and differential treatment of women within the top ranks of organizations (3, 11, 15, 20). Rosen and Jerdee (34) note that most research on organizations has been based on the assumption that managerial positions are the special province of males (p. 44).

The Feminist Movement

At the heart of the progress so far made by women in higher education lies a great social movement for change - The Women's Movement. According to Freeman (16, p. 1) a great number of books and articles published in the 1960s concerning the history, work and social position of women had concluded that not only was women's position pretty bad, but that women were not likely to do anything about it. These new works contributed considerably to the consciousness necessary for a woman's liberation movement to develop in the last half of the decade. Sandler (39 p. 439) agrees that when academic women began to reexamine their status in the late 1960s, the need to rectify that status quickly became obvious. Howe (23, pp. 135-136) points out that the power of women as a force for change in the 19th century was built on their perception of themselves as individually powerless, and like its 19th century counterpart, the contemporary movement began with a concept of mass organizing of women to gain legal rights to equity in employment and salary scales.

In a real sense, the women's movement was a reflection of the mood, frustration and powerlessness felt by individual women. Across college and university campuses, graduate women formed separate support groups which reflected the increasing concern of women graduate students about their future careers and employment (16, p. 29).

Two communication networks with different origins have been associated with the movement. The first network consisted largely of organized groups of employed women, notably the National Organization for Women (NOW) founded in 1966, and the Women's Equity Action League (WEAL) founded in 1968. The other network consisted of innumerable small groups with less formal contacts. Despite their dissimilarities in structures and strategies both were complimentary to the strengths of the movement (16, p. 5). NOW sought "to bring women into full participation in the mainstream of American society now, assuming all privileges and responsibilities thereof in truly equal partnership with men" (16, p. 7), while WEAL devoted its membership and concerns to "bringing class-action suits against higher education for its treatment of women" (23, p. 136).

Executive Orders 11246 and 11375 (discussed in the next section) provided legal avenues to combat discrimination. Hence in 1970, WEAL launched its national campaign by filing a historic class-action complaint against all universities and colleges in the country (39, p. 440; 16, p. 8; 7, p. 127). In turn, NOW filed complaints of sex discrimination against 1,300 corporations. Complete details concerning the formation and scope of activities of the movement are well documented in Rossi and Calderwood (37).

Obviously concern for the status of women in academe has its roots in the emergence of the larger women's

movement. A Carnegie Commission report (7, pp. 114-115) indicates that one of the most significant manifestations of the movement among professional women was the formation of a committee on the status of women in virtually every professional field. When the American Association of University Professors (AAUP) reactivated its dormant Committee W on the Status of Women in Academic Profession, it became apparent that a movement was sweeping through college campuses (37, p. xi). One is left with the impression of a rapid current engulfing the higher education community. But Freeman (16, p. 7) indicates that special efforts were made to recruit academic women, very few of whom were among its charter members, because "others were scared to death".

Surveys conducted of college and university faculties to develop information on the status of women produced results ranging from complete absence to highly skewed representation in some disciplines (7, p. 115). An important event of the period was the Campus Coordinating Committee which, under Ann Scot, issued 2500 "Academic Discrimination Kits" with instructions on how to file discrimination complaints against the university (16, p. 14).

Historically, women in higher education have been disadvantaged at all levels. From high school graduates through full professors, the percentage of women declines

(7, pp. 1-2). Hochschild (22) reechoes the point with the question:

> Why, at a public university like the University of California at Berkeley in 1972, do women compose 41 percent of the entering freshmen, 37 percent of the graduating seniors, 31 percent of applicants for admission to graduate school, 28 percent of the graduate admissions, 24 percent of the doctoral students, 21 percent of advanced doctoral students, 12 percent of the Ph.Ds, 38 percent of instructors, 9 percent of assistant professors, 6 percent of associate professors, and 3 percent of full professors? (22, p. 48).

Besides discrimination and early training of women to avoid success, Hochschild believes that a more probable explanation stems from "the classic profile of the academic career which is cut to the image of the traditional man with his traditional wife" (p. 49).

Eleanor Smith (46) puts it this way: "Even though women may have the necessary foundation for understanding their socialization process and may possess positive self-concept, in institutions of higher learning, the standard used to measure them is the white male" (p. 29). Similarly, O'Leary (29, p. 809) points out that societal sex role stereotypes, attitudes toward women in management, attitudes toward female competence and the prevalence of the "male managerial" model are external to the woman but may create barriers to her job related aspirations. Internal factors identified as having inhibitory effect on the expression of

upward occupational aspirations include fear of failure, low self-esteem, role conflict and fear of success.

Rosen and Jerdee (34, p. 44) note that there is some indirect evidence that supervisory role expectations are applied with equal force in judging male and female supervisors and that women are judged as less likely to meet these expectations, presumably because of the clash with generally accepted sex-role expectations. It is indicated elsewhere that society has so completely ignored women in their work roles that almost no adjustment has been made to the developing reality, suggesting that major changes will be necessary to incorporate a more realistic image of American women into our thinking (53, p. 374).

Although the academic profession is perceived as having responsibility for helping prospective teachers to see current sex role stereotypes as a dysfunctional phenomenon (53, p. 374), Smith (47, p. 31) urges those women who are striving to become effective, upwardly mobile administrators to consider doing a number of things including the acquisition of institutional perspective, and showing that they have such perspective. Also she emphasized an understanding of institutional climate and culture, and learning to read the political landscape. For Fairhurst and Snavely (15), the political atmosphere of some environments can preclude success for newcomers (p. 292).

In a recent article aptly dubbed "The Quiet Revolution on Campus: How Sex Discrimination Has Changed," Sandler (40, p. 272) reviewed changes which have taken place in higher education as a result of public policy prohibiting discrimination. She stated: "As a result of the passage of several anti-discrimination laws - especially Title IX, the law that prohibits sex-discrimination in federally assisted education programs - many forms of sex discrimination no longer exist, and major changes have occurred on virtually every campus in the country" (40, p. 72). However, she added that although much progress had been made in the 15 years following Title IX, some things have not changed notably: a) differential salaries for men and women of comparable qualification and experience, b) most women still majoring in traditionally female fields and preparing for traditionally female jobs, c) the distressingly little or no change in the proportion of full professors who are women despite the increase in the number of female assistant professors.

Thus it appears that the women's movement of the 1960s and 1970s did have some impact on the visibility and upward aspirations of women. What is not clear, however, is how much of the changes in institutional practices is attributable to the feminist movement and how much to the legislative activities of the period.

Affirmative Action and Equal Opportunity Legislation

At about the same time that the feminist movement was gathering momentum, a flurry of legislative and regulatory activities in the general area of affirmative action was sweeping the nation. Organizations were under legal pressure to integrate women in their ranks and file. Title VII of the Civil Rights Act (CRA) of 1964, amended in 1972; Executive Order No. 11246 of 1965 and No. 11375 of 1967, all addressed the issue of nondiscrimination, while written affirmative action plans became a requirement in May, 1968 (12, p. 10; 26, p. 36).

Similarly, with Revised Executive Order No. 4 (1971), the establishment of goals and time table was required as part of affirmative action plans (7, pp. 128-129; 26, p. 36; 39, p. 447). Thus, affirmative action plans became part of the hiring procedures in higher education when the Civil Rights Act (1964) was amended by the Equal Employment Opportunity Act of 1972 and when the Revised Order No. 4 (1971) was issued (26, p. 36).

It became obvious that the 1960s and 1970s marked a rapid expansion of government involvement in higher education (12, 13, 21, 26, 44). As Barbara Lee (28) puts it, the civil rights movement and other social changes which brought increased litigation to all sectors of the economy also affected higher education. She notes that, as reduced

funding for higher education exacerbated an already tight academic job market, and as high tenure ratios and the financial implications bothered colleges and universities, many institutions toughened standards for employment, tenure and promotion, resulting in more negative decisions for faculty who may have no other academic job opportunities (28, p. 42). Past, present, and would-be students and faculty sought to resolve their grievances against colleges in state and federal courts. On the other hand, the judicial system, its scrutiny and modification of traditional collegial decision-making became an enemy of academic norms and a force antithetical to the maintenance of academic standards (p. 38).

Prior to 1970 many women erroneously assumed that sex discrimination was illegal although no legal remedies were assured in existing federal statutes (39, p. 439). Sandler notes that the first federal legislation forbidding sex discrimination against students was not passed until October 1971 when the Public Health Services Act was amended to cover sex discrimination in admission into medical schools and other health professions. The prohibition of sex discrimination in all federally assisted education programs did not come until the Education Amendments Act was passed in June 1972.

At the employment level, although Title VII of the Civil Rights Act forbade sex discrimination, faculty were

exempt from coverage until the amendment of March 1972 (7, 26, 39). Although Executive Order 11246, as amended by Order No. 11375, specifically required federal contractors to practice nondiscrimination in all aspects of employment practices and to take affirmative action to ensure that applicants and employees are treated without regard to sex, Sandler points out that it is not a law but a series of guidelines which federal contractors must follow in order to receive or maintain federal contracts. As an administrative remedy for discriminatory practices, the order can be suspended or amended at the pleasure of a particular administration (39, p. 441). The laws and Executive Orders affecting education have been summarized in Rossi and Calderwood (37) and relevant parts are reproduced in Appendix A.

The announcement of the 1972 Higher Education Guidelines mandating colleges and universities to expand recruitment activities beyond traditional network approaches has precipitated much research concerning institutional compliance or the actual impact of the current programs and practices (12, 13, 26, 45). Some concern has been expressed regarding government encroachment upon institutional autonomy (13, 28, 44). Despite nearly 15 years of experience with affirmative action and equal opportunity legislation, there is evidence that institutions of higher

education are not complying with the spirit of the law (13, 45, 47). Others have indicated the existence of confusion and inconsistency in the interpretation and enforcement of the affirmative action requirements (21).

One of the earliest investigations concerning the affirmative action commitment of higher education institutions for administrative positions was reported in 1975 by Silvestri and Kane (45). Specifically, they sought to determine whether institutions were fully and actively cooperating in "good faith" to develop and implement genuine, positive and effective procedures for locating and recruiting qualified female and minority candidates for administrative positions, or whether they were simply designing internal administrative policies in which affirmative action was procedurally recognized but ignored in substance and spirit.

According to Silvestri and Kane (45) one approach to determine an institution's affirmative action commitment was to see if institutions which advertised openings in a particular publication also inquired about female and minority candidates who also publicized their availability in the same publication. Institutions which both advertised and contacted female and minority candidates who announced their availability would be associated with making positive affirmative action commitment. Those institutions which

advertised but failed to inquire further about the minority candidates would be characterized as showing reluctant commitment.

The Chronicle of Higher Education was selected as the professional publication for positions in higher education, and two groups of four fictitious advertisements were placed in the position wanted section of the May 13, 1974 issue. All of the eight candidates held a Ph.D. degree and were seeking administrative positions. Each group of four consisted of a black female, a black male, a white female and a white male. The two groups differed only in career longevity, one group having 7 years experience, the other, 1 year.

The researchers found that 120 institutional recruitment announcements were administrative in nature, yet none of these institutions inquired about any of the eight fictitious candidates who advertised their availability. Instead, a total of 11 inquiries were received from three nonadvertising institutions concerning the fictitious candidates. It was concluded that institutions may generously designate themselves as equal opportunity/affirmative action employers in their recruitment announcements, but few of them appear eager to expend the extra effort of contacting female and minority candidates who are seeking positions in the very same publications that the institu-

tions advertise their vacancies (p. 448). Silvestri and Kane (45, p. 450) suggest that institutions risk additional loss of autonomy if the reluctance to affirmative action commitment reflected in their study becomes widely perceived by the citizenry and their elected officials.

A study by Socolow (47) was concerned with how administrators in higher education get their jobs. Specifically, he observed trends and changes in recruitment and hiring practices by examining job notices in the Chronicle of Higher Education over a six week period in the Spring of 1977. From over 125 advertised positions, 72 were selected and 66 provided usable questionnaire returns. The 66 were stratified according to control (private/public) and then by Carnegie classification (research; doctoral granting; comprehensive universities; etc.).

The most striking finding of the study was the clear persistence of all the institutions in drawing only from a traditional pool of candidates - candidates from within academe. Socolow (47) also indicated that mandated hiring programs have not completely offset traditional hiring practices. For example, it was reported that most jobs went to individuals already at the employing institution, following a national search, or to candidates previously employed at the hiring institution. Socolow concludes that for the foreseeable future, individuals interested in lead-

ership positions in academe would do well to work within the old boy network as much as possible, toying with the job notice boards of eductional periodicals only as a second resort (47, p. 54).

Following the approaches of Socolow (47) and Silvestri and Kane (45), Dingerson, Rodman and Wade (12) examined the hiring of academic administrators since the 1972 Higher Education Guidelines. As in the previous two studies cited, the Chronicle of Higher Education was the selected source of position announcement on the basis of its wide circulation and acceptance among higher education personnel. Unlike these studies, however, Dingerson et al. (12) explored a much broader time frame, 1972-1976; examined specific academic administrative positions; and targeted their study to four-year colleges and universities. Thus, position announcements placed by medical schools, law schools, nursing schools and community colleges were excluded. Specifically, the study was designed to determine what effects the 1972 Guidelines may have had on the hiring practices and on actual hiring for select academic administrative positions.

The following issues were investigated: a) the yearly changes in the numbers of total positions advertised and the yearly changes in the numbers of advertised positions for select administrative positions; b) the numbers of positions

filled as a result of the advertisements; c) the current and past employment association which the incumbent had with the hiring institution; d) the sex and ethnic background of the person who vacated the position, and similar information on the person filling the position; e) the total number of applicants; and f) the number of candidates interviewed. The essence of these categories is to permit comparison between groups.

The population included all academic administrative position announcements for the chief academic officer (V.P. Academics), assistant and associate chief academic officers, academic deans, and assistant and associate deans placed in the Chronicle of Higher Education from January 1972 through December 1976. These leadership positions were chosen on grounds of their policy and decision-making nature. Approximately a total of 60,000 positions were announced in the Chronicle of Higher Education over the period. A sample of 481 were selected. Questionnaires sent to designated contact persons yielded 378 returns.

The following findings were reported. First, there was a substantial and consistent increase in overall position announcements which the researchers attributed, at least in part, to the federal legislationn relating to affirmative action. Similarly, the yearly changes in the numbers of advertisements for select administrative positions showed a similar trend.

Another significant finding concerned the positions filled. Of the 378 respondents, 176 (46.6%) indicated that the advertised positions were filled as a result of the Chronicle of Higher Education announcement; 159 (42.1%) indicated the positions were filled but not as a result of the advertisement. Of the 335 positions filled, 146 (43.2%) were filled by individuals who had some association with the hiring institutions, suggesting the persistence of traditional hiring approaches. These findings are consistent with findings reported by Socolow (47).

In terms of the sex and ethnic composition of new hires, Dingerson et al. report that black males and white females showed some gains; white males remained the same, and black females took some loss. Of 34 newly created positions 31 (91.2%) were filled by white males; and 38 percent of the successful candidates for the newly created positions were from the hiring institutions.

When all the findings are taken together, the following conclusions were warranted: "It seems reasonable to state, however, that the intent of the 1972 Guidelines relating to increased recruiting activities has been met for academic administrative positions. It also appears that the intent of the 1972 Guidelines relating to underrepresented populations filling positions is at best questionable" (12, p. 21).

A year following the publication of the study by Dingerson, Rodman and Wade (12), Kapel (26) investigated two aspects of affirmative action as applied to employment of managers/administrators and certain higher level staff personnel. The first concern was whether women were proportionally represented in the group of administrators and higher level staff personnel newly hired in institutions of higher education. Proportional representation meant the hiring of female administrators in numbers reflecting female representation in academe, namely 25.9% of all 9-month full-time faculty and 24.3% of all 12-month faculty using 1979/1980 figures. The second issue, was whether institutions truly and sincerely engaged in open and extensive talent search, or whether they still favored on-campus candidates for administrative positions.

One of several assumptions of the study was that implementation of affirmative action employment practices through extensive advertising would increase the employment applicant pool which would contain more highly qualified personnel than would pre-affirmative action pools. It was thus expected that a higher proportion of external candidates would be appointed to administrative positions.

Once again the Chronicle of Higher Education was the data source, and 30 issues from January 28, 1980 to September 8, 1980 were analyzed. Unlike previous studies,

the focus was the Gazette column of each issue. Institutions and individuals usually announce appointments and changes in this section, mainly administrative positions. Additionally, unlike the earlier studies, appointments in all types of higher education institutions (two year colleges, four year colleges and universities, etc.) were included.

A total of 1682 appointments were identified and were classified hierachically as Presidents/Chancellor; Vice President/Vice Chancellor/Provost; Deans; and Other Administrators. Each category was further subdivided as to whether the appointee was from the campus or from outside.

Chi-square analysis yielded the following findings. A total of 1345 males as opposed to 311 females received administrative appointments. The appointment of males was significantly higher than the expected 75%, and the appointment of female administrators was significantly below the expected 25%. Similar result was obtained in all but the lowest category of administrators.

On the question of external versus campus source of appointment, Kapel found that 683 (41%) of 1656 positions were filled with insiders. Earlier, Dingerson et al (12) found that 40 percent of 335 positions were filled with internal candidates. Kapel argues that, in order to meet affirmative action goals, significantly more outsiders than

insiders would be appointed since the limited number of minorities available in the employment pool on any campus requires an outside search. "Correct affirmative action policies, then, would expand the employment pool of qualified personnel and more outside candidates would be selected" (26, p. 42).

Finally, discovering that the positions of Vice President and Dean, both having strong policy and decision-making roles, were filled more with internal candidates, Kapel questions the openness of searches at these levels as well as the effect of affirmative action procedures for women in higher education. He concluded: "The statement, 'An Equal Opportunity Affirmative Action Employer' may be more words than fact, for hiring decisions speak louder than the printed word" (26, p. 42). In this regard Satryb and Kemerer (41) point out that "dollar amounts give no indication of a successful program. The number of persons hired and promoted is the final test and also the final defense" (p. 210).

In an apparent extension of their previous research (12), Dingerson, Rodman and Wade (13) examined the procedures and costs in the hiring of academic administrators into nationally advertised positions. The relationships of these variables (procedures and costs) to: a) actual hiring of internal versus external candidates, and b)

the hiring of white male versus members of underrepresented populations were investigated in an attempt to evaluate the implementation of the 1972 Higher Education Guidelines.

Specifically, the study sought to know if 1) search committees were used and to what extent; 2) there was a substantial change overall and between years by position in the cost of filling academic administrative positions; 3) there was a substantial difference overall and between years by position in the cost of filling positions with internal versus external candidate; and 4) there was a significant difference in the cost of filling positions with a female or minority group member as opposed to a white male. The study was based on the assumption that differences in costs and hiring practices could help explain if institutions were advertising nationally simply to meet the intent of affirmative action legislation and regulations, or if they were truly meeting the spirit of the law.

Two hypotheses were proposed. First, it was hypothesized that if the sampled institutions were meeting both the letter and spirit, there would be no substantial difference between the cost of hiring an internal candidate versus an external candidate, thus suggesting that reasonably consistent costs in hiring would be evidence of a fair and equitable search and hire process. It was also hypothesized that substantially higher costs would be

associated with extra effort on the part of institutions to hire a member of an underrepresented population over a white male. Such evidence would imply that institutions were taking their affirmative action responsibilities seriously.

It was found that the search committee was a standard tool for screening applicants for academic administrative positions. The study found no support for the contention that hiring an internal candidate was less costly or implied unfair search practices. It was found that institutions spend less when filling the assistant and associate dean and the assistant and associate chief academic officer positions than when filling the corresponding mentor positions.

However, the second hypothesis was not supported. Since insitutions, on average, spend approximately equal amounts when filling administrative positions with a female or minority applicant as with a white male, the researchers stated that "this is adequate evidence that institutions are not necessarily expending the extra effort called for in meeting their affirmative action commitments" (p. 73). They further indicate that despite annual increases in numbers of advertisements and costs in filling positions, little evidence exists concerning any change in the sex and ethnic make up of university administrators. This is consistent with reports of other researchers (12, 26, 45, 47).

From a somewhat different slant, Hitt, Keats and Purdum (21) investigated the criteria for affirmative action effectiveness. The judgement policies of personnel and affirmative action officers were assessed regarding the criteria deemed necessary for effective affirmative aciton programs. Thirteen separate criteria were identified, with results indicating that attitudes and procedures were the most significant factors (21, p. 3).

Satryb and Kemerer (41) contend that strong commitment by the entire campus community is the foundation for an effective affirmative action plan. Thus, if the middle management does not feel a strong commitment by top administrators, the most comprehensive and sophisticated affirmative action plan will fail.

There is much research evidence pointing toward the ineffectiveness of affirmative action programs in higher education or to the reluctance of institutions to hire and promote women into positions of authority (12, 26, 45). Similarly there appears to be concensus that very few women hold top administrative positions in organizations (2, 3, 4, 25, 27). In this regard, Andruskiw and Howes (2), note:

> In 1979, fewer than two hundred out of more than twenty-five hundred accredited institutions had women as chief executive officers. Nearly one-third of the women presidents are members of religious orders. Only one private university is headed by a woman. Only three public institutions with enrollments over ten

> thousand are headed by women. More than one-half of the state universities and land-grant colleges do not have women in top-level administrative positions (p. 475).

Despite the consensus, researchers differ in their perception of the causal attributions for the skewed representation of women along top organizational hierarchies. Several interrelated reasons have been offered, among which are blatant discrimination against women; negative attitudes toward women as administrators which makes functioning in such capacity difficult; devaluation of the performance of female administrators vis-a-vis the performance of their male colleagues; role incongruence or conflict between their femininity and the masculinity required in executive roles (2, pp. 475-476; 43).

According to Schlossberg (43), if a woman plays down her need to achieve - if she fails when she could succeed - she disappoints herself. If, on the other hand, she is achievement-oriented, and strives to succeed she is branded as unfeminine and viewed negatively by others" (p. 259). She further stated that psychological and internal reasons may explain in part why women fail to achieve or why few progress beyond the middle level, but presidents and other top administrative officials reinforce these barriers (p. 261).

The present study is directed toward an analysis of the attitudes of educators toward women as administrators in

higher education, specifically, the relationship between these attitudes and socioeconomic backgrounds. To begin to understand "why men are almost always chosen to fill the top executive positions by college boards of trustees" (1, p. 3) or why, "even in organizations with large numbers of a particular group at the lower levels, few members of that group are found at the top" (3, p. 805), it is appropriate to review literature in the general area of women in leadership positions.

Women in Management and Administration

Recent interest in the upward mobility of women has created opportunities for research concerning appropriate sex roles in the work environment. Women in management and administrative capacity have been extensively studied (14, 18, 48, 52), as have attributions for the misrepresentation (proportionally speaking) of women in traditionally male professions (3, 5, 15, 27, 29).

Many of the published reports in this general area of inquiry have produced conflicting impressions. In a review article concerning attitudinal barriers to occupational aspirations in women, O'Leary (29) notes:

> One of the critical problems confronting business and industry as they attempt to comply with current legislative efforts to equalize the distribution of men and women within the organizational hierarchy centers around the question of how to motivate the woman worker to aspire to ascendency into positions of higher status and responsibility (p. 809).

Contrary to this view, Donnell and Hall (14, p. 70) indicate that there are sex differences in managerial work motivation and the differences favor the female manager. Also, Bowker, Hinkle and Worner (4) have demonstrated that women were not only as interested in leadership positions as were men, but also aspired to even higher levels, which suggests that women are perhaps more confident in their managerial competence than they are given credit for.

Other studies published before and after O'Leary's (29) review article have indicated that organizations are unwilling to hire women into leadership roles (5, 14, 20). For example, Bowman, Worthy and Greyser (5, p. 166) reported that most male and most female executives agree that men are uncomfortable working for women; and that 41 percent of male and 18 percent of female executives admitted a personal unfavorable attitude toward having women in management (p. 26), while an overwhealming majority of male business executives would probably promote an unproven male candidate before a proven female into an executive slot.

Haefner (20) reported that employees prefer males to females as coworkers. He stated, "employees made little distinction between barely competent males and females, but in the choice between highly competent males and females, they indicated a clear preference for highly competent males" (p. 265). This is further indication that people are

often judged on physical traits rather than competence, a situation likely to intensify the tendency to withdraw from a social system.

Donnell and Hall (14) recognize that organizations are often apprehensive about women's capacity for handling managerial chores without doing harm to employee morale and organizational health. Their study which investigated the managerial practices of 950 females and 966 males found that women, in general, do not differ from men, in general, in the ways in which they administer the management process. They conclude that "the disproportionately low numbers of women in management can no longer be explained away by the contention that women practice a different brand of management from that practiced by men" (p. 76).

A study which may have helped perpetuate a negative, if stereotypical, perception of women was reported by Touhey (54) in 1974. Touhey examined the effects of additional women professionals on the prestige and desirability of certain high status occupations. To test his thesis, 114 male and 86 female introductory psychology students rated the prestige and desirability of five high-status professions, namely: architect, college professor, lawyer, physician and scientist. Experimental subjects were told that each of the professions would experience substantial increases in the proportion of female practitioners, while

the control group were told that no changes were expected in the sex ratios. The results showed a consistent tendency for each profession to suffer a decline in prestige and desirability scores when subjects expected increasing proportions of women. Touhey (54) therefore concluded that increasing proportions of women may reduce occupational prestige and desirability of high status occupations.

Suchner (49) replicated Touhey's (54) study and his "results based on 292 completed questionnaires proved at variance with Touhey's hypothesis" (p. 237). Additional replications by Crino, White and DeSanctis (10) also failed to confirm Touhey's results. Suspecting that Touhey's study may have resulted in overstated conclusions, Kluth and Muchinsky (27) reexamined the effect of varying sex composition, along with the effects of security, suitability of type of work, and company recognition. It was hypothesized that of all four factors, sex composition would have the least influence on job desirability. The hypothesis was upheld.

What then limits women from attaining leadership positions in numbers representing their availability? Research suggests negative attitudes of males (25, 29, 52). Johnston et al. (25) found that although 83 percent of male students of educational administration in their study agreed that females were capable and sincere about career commit-

ment, most male subjects objected to having a female administrator and would not hire females in administrative positions (pp. 315-316). O'Leary (29) noted:

> to the extent that promotional decisions on women are made by men in positions of authority, one obvious barrier to successful occupational advancement for women lies in the attitudes of their promoters toward women in management (p. 809).

Another critical factor is sex role stereotypes which posit that women make inferior administrators (6) and that the "good manager" possesses masculine characteristics (30). Because research has established that persons, who are sterotyped toward their own sex, preferred own sex-typed tasks and were uncomfortable with tasks culturally defined as appropriate to the opposite sex, Collins, Waters and Waters (9) presented additional evidence that such individuals would not only resist or feel uncomfortable performing cross-sex-typed tasks, but would also have more negative attitudes toward other persons performing cross-sex-typed tasks, such as women in management (pp. 828-829). Furthermore, it has been found that clear evidence of successful performance by a female manager will not influence attitudes toward women as managers because these attitudes are relatively stable (18, 48).

Additional empirical evidence suggests the existence of potential backlash of affirmative action legislation.

Chacko (8), for example, has argued that these special remedies may or may not be well received by women, especially if they perceive that they were hired simply to meet affirmative action requirements on grounds of their gender rather than their qualification. Evidence from 55 women in managerial and supervisory positions showed that those women who perceived that they were selected because of their sex had less organizational commitment, less satisfaction with work and with co-workers, and also experienced more role stress and ambiquity than women who felt sex was not an important selection factor.

Rosen and Jerdee (36) reported that male employees perceive that affirmative action gives women preferential treatment. They caution that employee frustration engendered by affirmative action policies could precipitate lower satisfaction, increased turnover and tension between the protected and unprotected employees (36, p. 18). Bartol (3, p. 806) adds that employers who state or imply that they are hiring a woman because she is a woman rather than because of her competence may be creating a context which inhibits appropriate job behaviors.

Although the balance of evidence points to the existence of sex-role stereotyping and sex discrimination in hiring and treatment of female executives, Andruskiw and Howes (2) argue persuasively that men and women hold similar

sex-role images. Data provided by 184 top level administrators in 144 institutions in ten northeastern states of the United States were analyzed. Results led to the conclusions that men and women administrators were more liberal than traditional, more similar than dissimilar in their attitudes toward sex characteristics and sex role images, and that sex of respondents was not a factor in their evalutations of men and women as administrators. It will be interesting to see how the present study compares with these findings.

Summary

This chapter examines literature concerning the advancement of women along organizational hierarchies. The focus is higher education. The categories of The Feminist Movement, Affirmative Action Legislation and Research on Women in Management provide the framework for the review.

Several competing factors appear to explain underrepresentation of women in top level positions. For example, certain cultural processes have been cited, notably, sex role stereotypes, discriminatory employment practices, differential sex role socialization, and unequal distribution of power and opportunity within organizational hierarchies (27). More directly, studies have linked occupational prestige and job desirability to sex

composition (10, 27, 49, 54). Other factors frequently encountered include motivation and lack of interest on the part of females. While some evidence of blatant sexism has been reported (54), it is encouraging to note that sexist attitudes are receding (1, 40). The present study is intended to add to the existing empirical evidence by focusing on higher education.

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CHAPTER III

METHODS AND PROCEDURES FOR COLLECTION OF DATA

Introduction

The objectives of this research and the testing of the hypotheses charted in Chapter I necessitated the collection of data from a sample of 300 of the defined population. It was felt that a survey instrument mailed to these 300 subjects would be an adequate technique for data collection. A search through the literature yielded two instruments which form the basis of the data reported in this study.

The Survey Instruments

The review of management literature produced the primary instrument for this research, namely, the Women as Managers Scale (WAMS), developed by Peters, Terborg and Taynor (10) at Purdue University in 1974. For the purposes of the present study, the instrument received minor editorial modifications. A further search through social measurement literature resulted in the second research instrument, namely, the Four Factor Index of Social Status developed by August Hollingshead (7) at Yale University in 1975.

The Four Factor Index of Social Status, developed on the consideration that social status is a multidimensional phenomenon, assumes that a differentiated, unequal status exists in society and that occupation, education, sex and marital status are the primary factors indicative of status (7, p. 2). At once, this multiple item scale provides an index of socioeconomic status and an assessment of status conditions. In the words of Hollingshead, "the scores computed by the use of this index are a measure of inequality in the social system of the United States" (7, p. 23).

In the present study, the education and occupation dimensions of the Four Factor Index, along with other demographic variables are grafted onto the main research instrument. The amount of education a person has completed is scored on a scale of 1-7, where 1 is the score for less than 7th grade and 7 the score for graduate or professional training. The occupation factor is scored on a 9-point scale keyed to the occupational titles of the U.S. Census Code, 1970.

According to Miller (9, p. 301) extensive studies of the reliability and validity of the two factors have produced very high estimates. Hollingshead himself (7, p. 22) reported a Product-Moment Correlation Coefficient of .927 between the Four Factor Index and the prestige scores

used by the National Opinion Research Center (NORC) for General Social Surveys. An individual's score on the Hollingshead scale is determined by multiplying the value for education by a weight of 3 and the value for occupation by a weight of 5, and summing up the products. In the case where both parents are employed, the calculation is performed for each and a mean score obtained. Scores on this scale range between 11 and 66.

The Women as Managers Scale (WAMS) was designed to identify and assess stereotypic attitudes toward women in business. Although researchers have had no trouble identifying a bias against women in management, little attention had been devoted to the development of an instrument that specifically measures this bias (5, p. 29). The existence of sex role stereotypes and their role in affecting behavior had often been inferred primarily from post hoc explanations, and a search for an instrument capable of assessing attitudes toward women as managers proved disappointing (10, pp. 2-3). Thus with the apparent influence of stereotypes on subsequent discriminatory behavior toward women and the lack of a suitable instrument to measure these stereotypes, Peters et al. (10) developed the Women as Managers Scale.

The WAMS is a 21-item instrument, with 11 of the items worded to favorably describe women as effective managers

while 10 items are worded unfavorably. Each item consists of a declarative statement about women in business and the respondent is requested to indicate his or her degree of agreement/disagreement using a 7-point Likert Scale (1 = strongly disagree, 7 = strongly agree). The respondent receives a score on a scale ranging from 21 (highly unfavorable attitude toward women in management) to 147 (highly favorable attitude, i.e. women are as competent in management as are men, (5, p. 29).

To establish the psychometric properties of the scale, Peters et al. (10) administered the instrument on a sample of 541 male and female undergraduates from four Midwestern and Southern colleges and universities. Data analysis (principal components approach) yielded three factors which accounted for 48% of the response variance. Factor I represented "general acceptance of females as managers," Factor II signified "feminine barriers" such as traditional stereotypic, biological-cultural barriers applicable to women in general for any type of full-time employment, and Factor III, "manager descriptive traits" comprised those personality traits often ascribed to managers - ambition, assertiveness, competition (10, p. 17).

A Split-half (odd-even) reliability of .84 was reported and when corrected for questionnaire length by the Spearman-Brown prophesy formula, a reliability of .91 was reported

(10, p. 30). Construct validity was established by correlating WAMS scores with self-reported liberal/conservative attitudes toward the women's rights movement. Correlations of r=.54 for males and r=.42 for females were reported. Additional evidence of validity was demonstrated in a study by Terborg, Peters, Ilgen and Smith (13) using a sample of full-time employees.

The Women as Administrators Scale
A modification of the Women as Managers Scale (WAMS)

Because the original instrument was developed with people in business situations in mind and was designed specifically to assess attitudes toward women in management, a modified version of it was used for the population of this study - the Higher Education Community of North Texas. Based upon consultations with and suggestions from the research committee for this study, business terms were changed to reflect equivalent academic terms. For example, the term "manager" was changed to "administrator," the term "business world" changed to "higher education world."

Pilot Study

Since the scale was to be administered to a sample radically different from student samples with which most studies involving WAMS have been conducted, a pilot study was carried out to check the face validity of the revised instrument and the feasibility of the planned procedures.

Furthermore, to ensure that minor editorial modifications introduced by the researcher have not jeopardized the psychometric properties of the instrument, a reliability check was run.

Twenty educators from North Texas State University were selected for the pilot study. This group was chosen in a manner that helped achieve some degree of representativeness of the academic community. For example, there were seven administrators and 13 faculty members drawn from different academic disciplines. These included 11 males and 9 females representing various rank categories. The response rate was approximately 75 percent. Comments from participants, where appropriate, were incorporated in the final survey scale. One participant felt that the WAMS instrument was transparent and its items would sensitize female subjects to the nature of the scale such that they may throw it into the wastebasket or even respond contrary to their actual beliefs.

Reliability

A reliability check was run using the Kuder-Richardson (formula 20) approach (11). This formula relates reliability coefficient to test length (n), test variance (σ_t^2), and variance of each test item as shown below:

$$r_{tt} = \frac{n}{n-1} \cdot \frac{\sigma_t^2 - \sum pq}{\sigma_t^2}, \text{ where}$$

r_{tt} = the reliability coefficient of test t.

σ_t^2 = the variance (square of the standard deviation of scores on test t).

p = percentage of correct answers given to a test item.

q = (1 - p) = percentage of incorrect answers to the item.

pq = variance of a single item.

n = number of items in the test.

The method yielded a coefficient of internal consistency of .88 which falls within an acceptable range for most attitude scales (see Borg and Gall, Table 7.2, p. 218). It should be recalled that Peters et al. (10) reported an initial reliability estimate of .84 (.91 after correcting for test length). Although Crino, White and DeSanctis (4) have questioned the reliability and unidimensionality of WAMS as have Cohen and Leavengood (3), other researchers find the scale quite valid and reliable (12) and WAMS has been used successfully in several studies (5, 6, 12, 13).

The Population

The universe with which the study was concerned consisted of all full-time faculty members and administrators in those institutions holding membership in the Association for Higher Education (AHE) of North Texas. Incorporated in 1980, the AHE is an educational consortium

with 25 institutional participants (17 if the Community/ Junior Colleges are counted at the system level) which "work cooperatively to further the higher educational needs of the region through joint planning and cooperative development of support and educational programs" (1, p. 5).

This community represents all types of higher educational institutions. There are among them 10 community/ junior colleges and 15 senior colleges and universities. Seventeen are publicly supported while 8 are private. One is predominantly black and others are racially mixed. One is predominantly female while the rest are coeducational. All are accredited by the Southern Association of Colleges and Schools.

The Sample

A multi-stage random sampling procedure was used in drawing the subjects. First, a sample of 11 institutions was selected from the 25 members of the AHE using a table of random digits to assure equiprobability of inclusion of each institution in the school sample. A letter was addressed to the presidents of the selected schools seeking permission to utilize their institutions in this study (Appendix B). The purpose of the study was explained and assurances given regarding institutional and subject anonimity. Permission was granted by nine of the presidents contacted, who also

furnished a listing of all faculty and administrators employed in their colleges during the 1984/85 academic year. In effect 36 percent of the AHE member institutions were included in the school sample.

The second stage of sampling involved the selection of subjects from the nine colleges and universities which had granted permission. It was an involved process because of differences among institutions with regard to organizational structure for administrative purposes. In some colleges, for example, the director of admissions was listed as an administrator but not in others. The same was the case with some library personnel such as directors and heads of library departments. When part-time faculty were included in the lists, as was the case in some colleges, such part-timers were deleted prior to sampling.

For the purposes of this study, an administrator was broadly defined to include anyone in higher education who has a decision-making role with respect to personnel and/or academic matters and has at least one person reporting to him or her. On the basis of this consideration, it was decided to include mid-management personnel in the sampled population. However, directors of resident halls, student organizations and other nonacademic related groups were excluded.

The selected colleges and universities provided nearly 2000 subjects employed full-time who fit the target population. The subjects were first classified into faculty/administrator, and each category was divided into male/female subcultures. These data are presented in Table 1. In the first and third sets of parenthesis are the proportions of faculty and administrators as a percentage of all educators in the selected institutions. The figures in the second and fourth sets of parenthesis represent proportions as percentage of faculty and administrators respectively.

To assure representativeness of these groups in the final sample, a proportionate random sample of 300 subjects

TABLE I

FACULTY AND ADMINISTRATORS BY GENDER FROM SELECTED INSTITUTIONS, 1984/85 ACADEMIC YEAR

Gender	Faculty	%Total	%Faculty	Admin.	%Total	%Admin.
Male	1169	(59.7)	(72.4)	261	(13.3)	(76.1)
Female	446	(22.8)	(27.6)	82	(4.2)	(23.9)
Total	1615	(82.5)	(100.0)	243	(17.5)	(100.0)

was drawn using a table of random digits. Borg and Gall (2, p. 294) suggest that the sample be representative of the population.

Procedures for Collection of Data

Written permission (Appendix C) was obtained from each instrument author allowing its use in the present study. To each of the 300 subjects was mailed a research package containing a letter of transmittal, the questionnaire with appropriate instruction, and also a self-addressed, stamped envelope in which to return the completed questionnaire.

The initial response to the survey was very encouraging. Of the 300 mailed out, 187 (62.3%) were completed and returned within two weeks. A follow-up letter with a copy of the questionnaire was sent to each of the nonrespondents three weeks after the stated deadline. This effort netted an additional 30 returns, giving a total of 217 returns (72.3% overall rate). All data were collected in the Spring of 1985.

Procedures for Analysis of Data

The responses were scrutinized for completeness and useability. Seven were incomplete and were therefore discarded. The remaining 210 were utilized. This number represents a 70% useable rate of return, considered excellent for survey research. Table II presents a distribution of the returns by gender and position type. It indicates a very reasonable rate of return by each group.

TABLE II

RETURN RATES BY GENDER AND POSITION TYPE

Category	Number Selected	Number Responding	Group Rate of Return	As % of Total Returns
Female Administrators	13	12	92.3	5.71
Male Administrators	40	34	85.0	16.19
Female Faculty	68	50	73.5	23.81
Male Faculty	179	114	63.7	54.29
Total	300	210	70.0	100%

The data collected were categorized by age, sex, socioeconomic status, present occupational position, professional experience, faculty/administrative responsibility, mother's work history, and experience under a female superordinate. These categories were appropriately coded and key punching was accomplished at the computing center at North Texas State University.

Multiple regression techniques were employed in the analysis. The choice was based on its general analytic ability in handling all types of variables including cases of missing data and unequal N's (8, p. 8). When a missing data point was encountered, the mean for the particular variable was substituted.

The dependent variable Y, is the score on the Women as Managers Scale, and the set of explanatory variables includes age, sex, socioeconomic status, mother's work history, experience under female superordinate, total professional experience, years in current position, rank, and type of institution. The regression model is:

$$Y = A + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + B_7X_7 + B_8X_8 + B_9X_9 + B_{10}X_{10} + B_{11}X_{11} + e.i.,$$

where A, B_1, B_2 .....B_{11} are constants, and

X_1 = sex, coded M = 1, F = 0

X_2 = age category, coded 1 if < 30 yrs., 2 = 30-40 yrs., 3 = 41-50 yrs., 4 = 50+ yrs.

X_3 = socioeconomic status (SES), coded according to score on the Hollingshead scale.

X_4 = Mother's work history (MWH), coded 1 if mother worked, 0, otherwise.

X_5 = Experience under female superordinate, coded 1 = yes, 0 = no.

X_6 = Total Professional Experience, coded 1 if under 5 years, 2 = 5-10 yrs., 3 = 11-20 yrs., 4 = over 20 years.

X_7 = Years in current position, coded as a number.

X_8 = Primary responsibility, coded Administrator = 0, Faculty = 1

X_9 = Type of Institution, coded 1 = Senior College, 0 = Community/Junior College.

X_{10} = Institutional Support, coded 1 = Public, 0 = Private.

X_{11} = Rank, contrast coded 1 = Professor, -1 = Assistant Professor, 0 for other ranks.

Complete analysis of the data are presented in Chapter IV.

Summary

This chapter has been concerned with the methods and procedures for the collection and analysis of data. In particular the survey instruments are described along with information on validity and reliability. The population, the sample and sampling procedures are discussed, and finally the data analysis technique and the variables are briefly explained.

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CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The central objective of this study was to determine the relationship, if any, between the socioeconomic backgrounds (SES) of educators and their attitudes toward women as administrators in higher education. The data-generating instruments employed were the Women as Administrators Scale [a modification of the Women as Managers Scale (4)] and the Hollingshead (3) Four Factor Index of Social Status. The primary hypothesis was that a positive relationship exists between attitudes and emergent socioeconomic status. A number of secondary hypotheses related attitudes to several professional and personal variables of interestt. What follows is a regression analysis of the data generated from administering the survey instruments to a sample of 209 responding educators in North Central Texas.

Table III is a listing of the variables used in the analysis in the order in which they entered the regression. The variable definitions appear in Chapter III which also explains the coding system adopted. Although eleven independent variables had been included in the regression

equation of Chapter III, variable X_{11}, academic rank, was contrast coded yielding two additional variables (X_{12} and X_{13}). Variable X_{11} contrasts Professors with Assistant Professors; X_{12} contrasts Professors with Associate Professors, and X_{13} contrasts Assistant Professors with Associate Professors. Four additional interaction variables

TABLE III

DEPENDENT AND INDEPENDENT VARIABLES

VARIABLE	ABBREVIATION	DEFINITION
Y (Dependent)	WAMS Score	A measure of attitude toward women as administrators
X_1	Sex	male/female categories
X_2	Age	chronological age
X_3	SES	emergent socioeconomic status (i.e. Parental)
X_4	MWH	mother's work history
X_5	FSUPR	experience under female superordinate
X_6	TPE	total professional experience
X_7	YCP	years in current position
X_8	PRESPO	primary responsibility
X_9	TI	type of institution-senior/community college
X_{10}	INSUPT	institutional support - public/private
X_{11}	RANKA	prof./asst. prof. contrast
X_{12}	RANKB	prof./assoc. prof. contrast
X_{13}	RANKC	asst./assoc. prof. contrast
X_{14}	(X_1 x X_4)	Sex x MWH Interaction
X_{15}	(X_3 x X_4)	SES x MWH Interaction
X_{16}	(X_1 x X_5)	Sex x Experience under female superordinate
X_{17}	(X_1 x X_8)	Sex x Primary Responsibility

were created by multiplying together selected independent variables. The interaction variables (X_{14}, X_{15}, X_{16} and X_{17}) bring the total to seventeen independent variables in the analysis.

Table IV is a summary of the means and standard deviations of the research factors. The mean WAMS score

TABLE IV

MEANS AND STANDARD DEVIATIONS (N=209)

Variable	Mean	Standard Deviation
Y (WAMS Score)	127.32	16.17
X_1 (Sex)	0.69	0.46
X_2 (Age)	2.89	0.80
X_3 (SES)	46.20	13.24
X_4 (MWH)	0.55	0.48
X_5 (FSUPR)	0.65	0.47
X_6 (TPE)	2.99	0.86
X_7 (YCP)	9.12	6.75
X_8 (PRESPO)	0.73	0.44
X_9 (TI)	0.78	0.42
X_{10} (INSUPT)	0.85	0.36
X_{11} (RANKA)	0.02	0.55
X_{12} (RANKB)	0.06	0.62
X_{13} (RANKC)	0.09	0.60
X_{14} (X_1 x X_4)	0.35	0.46
X_{15} (X_3 x X_4)	26.38	24.55
X_{16} (X_1 x X_5)	0.38	0.44
X_{17} (X_1 x X_8)	0.50	0.50

*One observation deleted from analysis due to extreme ontlier problem, leaving N=209

(Y=127.32) suggests that the group of educators in this study have a highly positive attitude toward women as administrators when compared to other groups of subjects to whom the WAMS has been administered (see Table VII).

Demographic Data

Demographic information was collected with the aid of the Hollingshead (3) scale and other researcher-introduced variables. Table IV indicates that the average respondent in this study is a male between the ages of 30 and 50 years but closer to the 40-50 year range. He has total professional experience between 5 and 20 years, but closer to the 11-20 year bracket. Similarly, he has spent an average of 9.12 years in his current position. He is typically an instructional or faculty officer (72.55% faculty; 27.45% administrator) employed in a publicly supported institution of higher education, predominantly a senior college as opposed to a community/junior college. More importantly, he seems to have come from the upper middle socioeconomic stratum, using the Hollingshead scheme (3, p. 24).

Mother's Work History

In addition to the above, 55.1 percent of the respondents (115 subjects) reported that they come from families where the mother has had some work experience outside the home. Of this number, 73 subjects (35.15

families where the mother has had some work experience outside the home. Of this number, 73 subjects (35.15 percent of the sample) are men whose mothers have worked at some time in their life.

Supervision By a Female

Another 65 percent of the respondents reported that they have had experience under a female supervisor. This group includes 80 males and 56 females representing respectively 38.27 percent and 26.79 percent of the sample.

The hypotheses in this study indicate the existence of positive relationships between the explanatory variables and the dependent criterion variable. The Pearson product moment correlation coefficient (r), the standard measure of linear relationship between variables (1, p. 36), is employed as part of this analysis. The values of r range from -1 through 0, to +1. The absolute value of r indicates the strength of the relationship and its sign gives the direction. Table V presents a matrix of zero-order intercorrelation coefficients between the variables in this study.

Table VI presents a summary of the ordinary least squares regression results with the independent variables entered both simultaneously and hierarchically. The simultaneous and hierachical regression coefficients have been included to permit a better evaluation of the relative

TABLE V

ZERO-ORDER INTERCORRELATION MATRIX (PEARSON r)
(N=209)

	(1) Y	(2) X_1	(3) X2	(4) X3	(5) X4	(6) X5	(7) X6	(8) X7	(9) X8	(10) X9	(11) X10	(12) X11	(13) X12	(14) X13	(15) X14	(16) X15	(17) X16	(18) X17
Y	1.00																	
X1	-.266**	1.00																
X2	-.150*	.076	1.00															
X3	.060	-.095	-.055	1.00														
X4	.158*	-.126	-.170*	.150*	1.00													
X5	.118	-.300**	-.059	-.047	.037	1.00												
X6	-.049	.061	.672**	-.052	-.141*	-.032	1.00											
X7	-.236**	.165*	.576**	-.073	-.252**	-.025	.585**	1.00										
X8	-.103	.004	.002	.033	-.068	-.012	-.103	.163*	1.00									
X9	-.115	.292**	.072	.122	-.042	-.344**	.099	-.018	.062	1.00								
X10	.023	.040	.027	-.083	.013	-.053	.024	.055	.084	-.222**	1.00							
X11	-.180*	.124	.368**	-.015	-.167*	-.030	.378**	.398**	.027	-.040	.043	1.00						
X12	-.107	-.084	.209**	-.039	-.153*	.062	.179*	.142*	-.063	-.091	.023	.483**	1.00					
X13	-.055	.201**	.121	.026	.005	-.092	.162*	.218**	.090	.057	.015	.418**	-.594**	1.00				
X14	-.064	.514**	-.098	.075	.645**	-.150*	-.092	-.070	-.056	.091	.009	-.041	-.201**	.171*	1.00			
X15	.159*	-.131	-.152*	.375*	.935**	.043	-.130	-.242**	-.068	-.014	.000	-.152*	-.129	-.006	.590**	1.00		
X16	-.141*	.532**	-.010	-.087	-.063	.571**	.006	.104	-.020	-.034	-.004	.067	-.026	.089	.277**	-.048	1.00	
X17	-.254**	.679**	.036	-.097	-.136	-.224**	-.020	.239**	.608**	.257**	.049	.132	-.117	.243**	.297**	-.170*	.342**	1.00

*Significant at .05 level; **Significant at .01 level

contributions of these variables in explaining attitudes toward women as administrators. In this regard, the incremental R^2 and the simultaneous squared semi-partial correlations are particularly important and give indication of the existence of multicollinearity among the independent variables.

The squared semi-partial correlation coefficients ($sr_i^{2)}$ determined simultaneously (column 5) indicate the unique contribution of each variable to the variance of the dependent variable (WAMS). Similarly, the simultaneous fully partialled correlation coefficients (pr_i^2) were calculated and appear in column 6. These tell how much of the variance in WAMS score not explained by the other variables in the model is estimated by a given independent variable. The very small values of the squared semi-partial and squared partial coefficients (columns 5 & 6) is indicative of severe multicollinearity among the independent variables.

Although the simultaneous squared semi-partials (column 5) may lead to suspicion that the independent variables are of trivial importance in explaining attitudes (WAMS), the hierachical analysis suggests a different picture. Column 10 of Table VI (IR^2) is the incremental contribution of each variable to the variance of WAMS. In the absence of multicollinearity, column 10 and column 5 would be consistently similar.

TABLE VI

OLS REGRESSION RESULTS FOR ATTITUDES TOWARD WOMEN AS ADMINISTRATORS

(N = 209)

	Simultaneous (Fully Partialled)					Hierachical (Incremental)			
(1) Regressor	(2) Beta	(3) B	(4) T	(5) sr^2	(6) Pr2	(7) Beta	(8) B	(9) T	(10) IR2
X_1 (Sex)	.0558	1.9449	.261	.0003	.0004	-.2656	-9.2550	-3.963*	.0705
X_2 (Age)	-.0964	-1.9542	-1.01	.0045	.0053	-.1306	-2.6470	-1.957*	.0170
X_3 (SES)	.0263	.0321	.284	.0004	.0004	.0290	.0354	.433	.0008
X_4 (MWH)	.0638	2.1606	.235	.0002	.0003	.1061	3.5900	1.548	.0106
X_5 (F.SUPER)	.2456	8.3690	1.469	.0094	.0112	.0395	1.3468	.564	.0015
X_6 (TPE)	.1837	3.4645	1.844**	.0149	.0175	.1044	1.9681	1.161	.0059
X_7 (YCP)	-.1940	-.4646	-2.050*	.0184	.0215	-.2227	-.5334	-2.546*	.0279
X_8 (PRESPO)	-.0514	-1.8804	-.424	.0008	.0009	-.0462	-1.6913	-.671	.0020
X_9 (TI)	-.0589	-2.2935	-.749	.0025	.0029	-.0592	-2.3067	-.801	.0027
X_{10} (INSUPT)	.0400	1.8139	.572	.0014	.0017	.0382	1.7342	.553	.0014
X_{11} (RANKA)	-.2395	-7.0426	-.009	.0000	.0000	-.1077	-3.1666	-1.450	.0090
X_{12} (RANKB)	.1125	2.9287	.004	.0000	.0000	-.0789	-2.0560	-1.021	.0045
X_{13} (RANKC)	.1933	5.2236	.006	.0000	.0000	.1883	5.0883	.006	.0000
$X_{14}=(X_1 \cdot X_4)$	-.0823	-2.8870	-.571	.0014	.0017	-.0800	-2.8092	-.561	.0014
$X_{15}=(X_3 \cdot X_4)$	.0580	.0381	.224	.0002	.0003	.0264	.0174	.104	.0000
$X_{16}=(X_1 \cdot X_5)$	-.2596	-8.6795	-1.396	.0085	.0101	-.2599	-8.6914	-1.403	.0086
$X_{17}=(X_1 \cdot X_8)$	-.0075	-.2435	-.045	.0000	.0000	-.0075	-.2435	-.045	.0001

A = 122.36 Y = 127.32 *p < .01

R = .4048 R^2 = .1638 **p < .05

From Table VI, it appears that four independent variables among the 17 variables in the analysis; namely, Sex (X_1), Age (X_2), Total Professional Experience (X_6) and Years in Current Position (X_7) are uniquely related to attitude toward women as administrators. Total Professional Experience is statistically significant at the .05 level, whereas the other three variables Sex, Age and Years in Current Position are significant at the .01 level. Together these four variables account for a little over 12 percent of the variance of attitudes toward women as administrators.

Although the model as a whole is significant, at the .01 level [$F=2.2$, $p<.01$, df: 17, 191], it is obvious that it does not explain much of the attitude variance. Only 16.38 percent of the variance in attitude is explained.

Summary

The major findings of this study are as follows:

1. It was determined that sex of the respondents was a significant factor in explaining attitudes toward women as administrators in higher education.

2. The age of respondents was significantly related to attitudes toward women as administrators, with younger respondents showing more positive attitude than did older respondents.

3. Total Professional Experience was also

significantly related to attitudes toward women as administrators.

4. Similarly, the number of years in current position was significantly related to attitudes toward women as administrators.

Other noteworthy findings include the following:

1. The majority of repondents, 55 percent (115 subjects), are from families where the mother has had outside work experience.

2. About 65 percent of respondents have worked under a female superordinate.

3. The average respondent in this study comes from the upper middle socioeconomic class.

Thus, although, the study found significant relationships between attitude and a number of personal and professional variables, no relationship was found between socioeconomic background and attitude. Also attitude was not significantly related to mother's work history or to experience under a female superordinate.

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CHAPTER V

INTRODUCTION, SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter presents a brief overview of the study and a summary of the findings. A discussion of these findings in light of previous research is included and some conclusions are drawn as a result of the analysis of the data collected. Finally, recommendations for further study are included.

Overview

In a social system such as higher education, the occupational position of an individual is often indicative of ability, character, training and skills which affect performance and productivity. Yet in some situations, upward mobility along organizational hierarchies is determined by non-job related factors. The present study was designed to examine attitudes toward women as administrators in higher education. The underlying purposes were to determine the relationship, if any, between the socioeconomic backgrounds of educators and their attitudes toward women as administrators; to compare the attitudes of

male and female educators toward women as administrators; and to see if results from the higher education community parallel what obtains in the larger society.

To this end, a proportionate random sample of 300 male and female educators drawn from nine colleges and universities in North Central Texas received a research package. Useable data returned by 209 subjects were analyzed using multiple regression techniques.

Summary of Major Findings

The major findings of this study fall into two distinct areas: a) personal variables and b) professional variables. Relative to personal variables the following findings were recorded:

1. Sex of the respondent appears to be the single most significant factor explaining the variance in attitudes toward women as administrators.

2. Age of respondents was also an important factor explaining attitudes toward women as administrators.

Relative to professional variables, two factors appear relevant in explaining attitudes.

1. Total Professional Experience was statistically related to attitude toward women as administrators.

2. Years in Current Position was also significantly related to attitudes toward women as administrators.

Discussion

Over the last decade, several studies have examined attitudes toward women as managers in various organizational settings. Table VII which follows is a summary of mean WAMS scores from selected studies between 1974 and 1985.

Although these studies are markedly different in several respects, for example, sample characteristics and analytic techniques, certain similarities in results are obvious. Some studies sampled students in various disciplines; some used full-time employees and different organization types. For most of the studies regardless of sample differences, females consistently received higher mean scores than did corresponding male subgroups.

For the present study and the study by Garland et al. (2) (Nos. 9 & 10 in Table VII), the male subgroups had higher mean scores than most other male samples. This is perhaps because of the humanistic orientation of the organizations in which the subjects work. The very high mean WAMS score, Y = 127.32, in the present study suggests that educators are more liberal than traditional, similar to the finding reported by Andruskiw and Howes (1). However, contrary to Andruskiw and Howe's finding, this study indicates that sex of the respondent was a significant factor. Female more than male educators were more liberal as seen here, although educators as a group are more liberal than traditional in their attitudes toward women.

TABLE VII

MEAN WAMS SCORES FROM THIS AND VARIOUS OTHER STUDIES

Comparison of Mean WAMS Scores in This Study and Earlier Research

NO.	RESEARCHER/DATE	SUBJECTS & SAMPLE SIZE	MEAN WAMS SCORE (MALE)	MEAN WAMS SCORE (FEMALE)	MEAN WAMS SCORE (ALL SUBJECTS)
1.	Peters, Terborg & Taynor (1974)	N = 541 Undergraduates: 345 Males, 196 Females	109.15	132.27	117.53
2.	Terborg, Peters, Ilgen & Smith (1977)	N = 280 F/T. Employees: 180 Males, 100 Females	102.11	119.38	108.28
3.	Garland & Price (1977)	N = 123 Male Undergraduates of Organizational Behavior	104.8*	n.a.	105.08
4.	Cohen & Leavengood (1978)	N = 78 Male Students of Management	109.91	n.a.	109.91
5.	Collins, Waters & Waters (1979)	N = 339 Undergraduate Psychology Students: 117 Males, 222 Females	100.50	125.62	116.95
6.	Welsh (1979)	N = 56 Psychology Students: 28 Males, 28 Females	110.42	125.03	117.75
7.	Crino, White & DeSanctis (1980)	a) N = 1,014 Students of Business	103.10	129.65	112.24
		b) N = 602 Male and Female Managers	111.26	128.36	122.80
8.	Stevens & Denisi (1980)	N = 226 Students Studying Individual and Group Behavior in Organizations 143 Males, 83 Females	109.23	131.65	117.46
9.	Garland, Burnson & Hale (1982)	N = 110 Employees of a State Human Services Agency: 52 Males, 58 Females	116.77	129.43	123.45
10.	This Study: Okoro (1985)	N = 209 Educators	123.64	133.69	127.32**

*For a subsample of 75 subjects.

**Comparably high positive attitude mean score on the part of Educators.

n.a. = No Females in sample.

The primary hypothesis of this study relates socioeconomic background to attitudes. In particular, Hypothesis 1 stipulates that respondents of higher socioeconomic backgrounds will show more positive attitude toward women as academic administrators than will respondents of lower socioeconomic backgrounds. From the regression results (Table VI), it can be seen that socio-economic background (SES) accounts for less than 1/10 of one percent of the variance of the dependent variable. Hypothesis 1 is therefore rejected.

Hypothesis 6 stated that there will be a positive relationship between years of experience (X_6) and attitudes toward women as administrators (Y). This was statistically significant at the .05 level in the fully partialled model, but not significant in the hierarchical model. This was due to suppression of total professional experience by years in current position. For every additional year of professional experience, there is on average a positive change in attitude of nearly 3.5 points.

A possible explanation for this observation is that career longevity is likely to be directly related to job change. The longer the total professional experience, the more likely it is that the subject has moved around, for example, from one institution to another, and hence attitudes improve relative to spending the entire career in

one location or job. The results of Hypothesis 6 may be a direct consequence of experience in reducing negative attitude, or a reflection of the increasing acceptance of women in leadership positions as a result of affirmative action laws, or it may be a combination of both factors. In their "Assessment of the Chilly College Climate for Women," Heller, Puff and Mills (3) found no evidence that women were treated in any way as second class citizens.

Hypothesis 2 states that female faculty will have more positive attitude toward women as administrators than will male faculty; and Hypothesis 3 posits that female administrators will have more positive attitude toward women than will male administrators. Taken together, these hypotheses suggest that female educators will have more positive attitudes toward women as administrators than will male educators. Females on average scored higher on the criterion measure. This is consistent with previous studies in which the WAMS was employed.

Hypotheses 5 had posited a positive relationship between WAMS score and the variables of academic rank (X_{11}, X_{12}, and X_{13}). Besides being insignificant, the signs were largely opposite to that hypothesized. The hypothesis was therefore rejected.

Hypothesis 7 stated that there will be a positive relationship between experience under a female superordinate

(X_5) and educator attitudes toward women as academic administrators. Although the variable (X_5) - experience under a female superordinate - had the predicted direction, the relationship was mildly weak to be meaningful.

The last item in the questionnaire asked respondents to comment briefly on their experiences under a female superordinate. The reason was to see if such experience was related to their ratings of women in the preceding items of the WAMS. On average, 65 percent of the respondents (136 subjects) reported having worked under female supervision. Although response to this item was not quantified, most comments were generally favorable. Typical responses included such comments as "no different from males, very positive in most cases", "open, direct, pleasant communication channels, more sensitive to emotional needs than male administrators."

Conclusions

The results of the data analysis permit some speculative inferences. The findings lead one to conclude that attitudes toward women in leadership roles in higher education are explainable by a combination of job and non-job related factors. Given that women are in the minority among faculty and administrators (Table I), and given that males in this study have less positive attitudes than have

females, the likelihood for female advancement into positions of academic leadership is less than it is for males.

On the other hand, the findings that younger cohorts among the respondents were more positive than the older group of educators, and that experience under a female had weak positive effect, coupled with the overall positive comments on the female supervision variable leave room for optimism. The comparably high positive attitudes of educators reflected in the mean WAMS score suggests good opportunities for women in leaderhsip positions in higher education.

Finally, the model, albeit its significance, explains only 16 percent of the variance, meaning that there are some variables not in the model which are capable of explaining attitudes toward women as administrators. Probably, this study suffers from model misspecification. The inclusion of other variables could improve the model by increasing the amount of variance explained. Furthermore, the partial coefficients of the variables in the present model could change leading to a different set of conclusions.

Recommendations

The following are suggested as possible areas for future inquiry:

1. Because of the low explanatory power of the model it is recommended that the study be re-examined with more variables.

2. It is further recommended that the study be replicated in other institutional environments, such as colleges and universities in non-metropolitan areas, or perhaps with a regional or national sample.

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APPENDIX

APPENDIX A

AFFIRMATIVE ACTION/EQUAL OPPORTUNITY LEGISLATION IN EDUCATIONAL INSTITUTIONS (1972)

P R O G R A M & D A T E P A S S E D

	(1) Equal Pay Act 1963 as amended by Education Amendments 1972	(2) Title VII of Civil Rights Act (1964) as amended by EEO Act (1972)	(3) Executive Order 11246 (1965) as amended by 11375 (1968)	(4) Title VII and Title VIII of Public Health Services Act amended 1971	(5) Title IX of Education Amendments (1972)
Effective Date	7/1972 (6/1964 - nonprofessionals).	3/1972 (6/1965 for non-professionals; and 3/73 for institutions with 15-24 employees).	10/1968	11/1971	7/1972 (7/1973 for admissions provisions.)
Institutions Covered	All institutions.	All institutions with 15 or more employees.	All institutions with $10,000 in federal contracts.	All institutions receiving or benefiting from grants, loans, subsidy to the Public Health Services Act.	All institutions receiving federal grants, loans or contract invoices.
Discrimination Covered	Sex Discrimination in Salaries and fringes.	Employment Discrimination on basis of sex, race, color, religion, or national origin.	Employment (hiring, salaries, promotion, benefits) discrimination on basis of sex, race, religion, national origin.	Sex Discrimination in admission.	Sex Discrimination against students or others.
Exemptions	None	Religious institutions are exempt from employing individuals or particular religion. However, no exceptions from discrimination based on sex, race, national origin.	None	Religious institutions.	Religious and military institutions under certain conditions.
Affirmative Action Requirements	Not required, except for salary increases and back pay.	Affirmative Action not required, although Court could order affirmative action in conciliation agreement.	Numerical goals and time table required.	May be required after discrimination is found.	May be required after discrimination is found.
Enforcement Agency	ESA	EEOC	OFCC or OCR	OCR	OCR

SOURCE: Rossi and Calderwood eds. (1973), Appendix B. With Permission From Publishers.

NOTE: ESA, Employment Standards Administration; EEOC, Equal Employment Opportunity Commission; OFCC, Office of Federal Compliance Commission; OCR, Office of Civil Rights.

APPENDIX B

INTRODUCTION LETTER TO

COLLEGE AND UNIVERSITY PRESIDENTS

J.C. Matthews Chair of Higher Education
North Texas State University
101

Dear President _____:

Your institution is among several colleges and universities which have been randomly selected to be part of a doctoral research study being conducted through North Texas State University. The purpose of this study is to attempt to determine the relationship between the emergent socioeconomic backgrounds of educators and their attitudes toward women as academic administrators.

The study will involve the completion of a survey instrument to be mailed to a random sample of faculty and administrators in each of the selected institutions. Your institution or the participants will not be identified in any way.

Your permission is requested to mail the instrument to selected faculty and administrators in your school. It would also be extremely helpful if you would send a list of faculty and administrators who are currently employed at your institution to me. A summary of the results will be available upon request.

Thank you for your assistance and participation.

Sincerely,

Greg I. Okoro

Greg I. Okoro

Dwane Kingery

Dr. D. Kingery
Professor of Education

Denton, Texas 76203

APPENDIX C

PERMISSIONS

PERMISSION FORM

Permission is granted Greg I. Okoro to mail the survey instrument for his study to faculty and administrators at _____ University/College.

_____
Signature

_____
Title

_____
Date

Southern Illinois
University at Carbondale
Carbondale, Illinois 62901

Department of Administrative Sciences
(618) 453-3307

Sept. 4, 1984

Mr. Greg Okoro
12213 Plano Rd.
Dallas, TX 75243

Dear Greg:

I am pleased to provide my permission to use the WAMS scale for your research. I have enclosed a copy of the manuscript which describes the development of this scale. Other research involving this measure can be found in journals such as the Journal of Applied Psychology and the Academy of Management Journal. Good luck with your research.

I tried to return your call for several days. Sorry it was so difficult to get in touch with me.

Sincerely,

Larry Peters

Lawrence H. Peters

Yale University

Department of Sociology
P.O. Box 1965 Yale Station
New Haven, Connecticut 06520-1965

Campus address:
140 Prospect Street
Telephone:
203 436-8128

November 30, 1984

Greg Okoro
12213 Plano Road, #2038
Dallas, Texas 75243

Dear Mr. Okoro:

You have permission to use A.B. Hollingshead's Four Factor Index of Social Status (unpublished manuscript, 1975).

Sincerely yours,

Pamela B. Colesworthy

Pamela B. Colesworthy
Administrative Assistant

APPENDIX D

THE RESEARCH INSTRUMENTS

The Women as Managers Scale (WAMS)

(Original Instrument)

Instructions	Rating Scale
The following items are an attempt to assess the attitudes people have about women in business. The best answer to each statement is your **personal opinion.** The statements cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others. Whether you agree or disagree with any statement; you can be sure that many people feel the same way you do.	1 = Strongly Disagree 2 = Disagree 3 = Slightly Disagree 4 = Neither Disagree or agree 5 = Slightly Agree 6 = Agree 7 = Strongly Agree

Using the numbers 1 to 7 on the rating scale to the right, mark your personal opinion about each statement in the blank that immediately precedes it. Remember, give your **personal opinion** according to how much you agree or disagree with each item. Please respond to all 21 items. Thank you.

_____ 1.[a] It is less desirable for women than men to have a job that requires responsibility.

_____ 2. Women have the objectivity required to evaluate business situations properly.

_____ 3. Challenging work is more important to men than it is to women.

_____ 4. Men and women should be given equal opportunity for participation in management training programs.

_____ 5. Women have the capability to acquire the necessary skills to be successful managers.

_____ 6. On the average, women managers are less capable of contributing to an organization's overall goals than are men.

_____ 7. It is not acceptable for women to assume leadership roles as often as men.

_____ 8. The business community should someday accept women in key managerial positions.
_____ 9. Society should regard work by female managers as valuable as work by male managers.
_____ 10. It is acceptable for women to compete with men for top executive positions.
_____ 11. The possibility of pregnancy does not make women less desirable employees than men.
_____ 12. Women would no more allow their emotions to influence their managerial behavior than would men.
_____ 13. Problems associated with menstruation should not make women less desirable than men as employees.
_____ 14. To be a successful executive, a woman does not have to sacrifice some of her femininity.
_____ 15. On the average, a women who stays at home all the time with her children is a better mother than a woman who works outside the home at least half time.
_____ 16. Women are less capable of learning mathematical and mechanical skills than are men.
_____ 17. Women are not ambitious enough to be successful in the business world.
_____ 18. Women cannot be assertive in business situations that demand it.
_____ 19. Women possess the self-confidence required of a good leader.
_____ 20. Women are not competitive enough to be successful in the business world.
_____ 21. Women cannot be aggressive in business situations that demand it.

---

[a]Items 1, 3, 6, 7, 15, 16, 17, 18, 20, and 21 should be reverse scored so that a high scale score is associated with a favorable attitude toward women as managers.

The Women as Administrators Scale

A Modification of the Women as Managers Scale (WAMS)

Instructions: The following items are an attempt to assess the attitudes people have about women in higher education. The best answer to each statement is your personal opinion. The statements cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others. Whether you agree or disagree with any statement, you can be sure that many people feel the same way you do.

Using the numbers from 1 to 7 on the rating scale given below, mark your personal opinion about each statement in the blank that immediately precedes it. Remember, give your personal opinion according to how much you agree or disagree with each item. Please respond to all 21 items. Thank you.

RATING SCALE

1 = Strongly Disagree

2 = Disagree

3 = Slightly Disagree

4 = Neither Disagree nor Agree

5 = Slightly Agree

6 = Agree

7 = Strongly Agree

Rating Scale

1 = Strongly Disagree
2 = Disagree
3 = Slightly Disagree
4 = Neither Disagree nor Agree
5 = Slightly Agree
6 = Agree
7 = Strongly Agree

_____ 1. It is less desirable for women than men to have a job in higher education that requires responsibility.

_____ 2. Women have the objectivity required for proper evaluation of trends in higher education.

_____ 3. Challenging work is more important to men than it is to women.

_____ 4. Men and women should be given equal opportunity for participation in faculty development programs.

_____ 5. Women have the capability to acquire the necessary skills to be successful academic administrators.

_____ 6. On the average, women administrators are less capable of contributing to an organization's overall goals than are men.

_____ 7. It is not acceptable for women in higher education to assume leadership roles as often as men.

_____ 8. The higher education community today should accept women in key administrative positions.

_____ 9. Society should regard work by female administrators as valuable as work by male administrators.

_____ 10. It is acceptable for women to compete with men for top administrative positions in higher education.

_____ 11. The possibility of pregnancy does not make women less desirable administrators than men.

_____ 12. Women do not allow their emotions to influence their administrative/managerial behavior any more than men do.

Rating Scale

1 = Strongly Disagree
2 = Disagree
3 = Slightly Disagree
4 = Neither Disagree nor Agree
5 = Slightly Agree
6 = Agree
7 = Strongly Agree

_____ 13. Problems associated with menstruation should not make women less desirable than men as administrators.

_____ 14. To be a successful administrator in higher education, a woman does not have to sacrifice some of her femininity.

_____ 15. On the average, a woman who stays at home all the time with her children is a better mother than a mother who works outside the home at least half the time.

_____ 16. Women are less capable of learning mathematical and mechanical skills than are men.

_____ 17. Women are not ambitious enough to be successful in the academic world.

_____ 18. Women cannot be assertive in higher education situations that demand it.

_____ 19. Women possess the self-confidence required of good leaders in higher education.

_____ 20. Women are not competitive enough to be successful as administrators in the higher education world.

_____ 21. Women cannot be aggressive in administrative/ management situations that demand it.

Please respond to the following items:

1. Sex: ____Male ____Female

2. Age: ____Under 30 ____30-40 ____41-50 ____Over 50

3. Major Responsibility (check one): ____Faculty

____Administrator

4. Position Held (check one):

A. Faculty: ____Lecturer/ Instructor ____Assistant

____Associate ____Professor

B. Administrator: ____Director ____Dept. Chair

____Dean ____Other (Specify:_____)

5. Type of Institution:

A. _____Public _____Private

B. _____Senior College _____Community/Junior College

6. A. Total Years of Professional Experience:

_____Under 5 yrs. _____5-10 yrs. _____11-20 Yrs.

_____Over 20 yrs.

B. Years in current position: _____ yrs.

7. Level of School <u>COMPLETED</u> By:

A. Father: ____Less than 7th grade ____Jr. High(9th grade)

____Partial High School(10th or 11th grade)

____High School Graduate

____Partial College or Specialized Training

____Standard College or University Graduate

____Graduate Professional Training

B. Mother: ____Less than 7th grade ____Jr. High(9th grade)

____Partial High School(10th or 11th grade)

____High School Graduate

____Partial College or Specialized Training

____Standard College or University Graduate

____Graduate Professional Training

8. Father's Occupation: _____

9. Mother's Occupation: _____

State Whether: ____Part Time ____Full Time

____Never Worked Outside Home

10. Have you ever worked under a woman superordinate?

____Yes ____No

11. Comment briefly on your experience under a woman superordinate:

_____

_____

_____

_____

APPENDIX E

THE LETTER OF TRANSMITTAL

J.C. Matthews Chair of Higher Education
North Texas State University

February 12, 1985

Dear _____:

You have been selected as a representative of the higher education community in the northern region of the State of Texas. Please respond anonymously to the enclosed questionnaire which is part of a dissertation research.

This study concerns the relationship between socioeconomic background and attitudes toward women as academic administrators. Kindly complete and return the enclosed questionnaire by February 28, 1985. It should not take more than 10 minutes to complete the questionnaire.

To insure anonymity, respondents are requested not to disclose their identity. A summary of the results will be provided upon request.

Thank you for your cooperation.

Sincerely,

Greg I. Okoro

Greg I. Okoro

Dwane Kingery

Dr. D. Kingery
Professor of Education

Denton, Texas 76203

APPENDIX F

FOLLOW-UP LETTER

Dear _____:

Several weeks ago I sent you a letter along with a survey instrument for a study I am conducting for the degree of Doctor of Philosophy at North Texas State University. Since I have not received your completed questionnaire my assumption is that you did not receive it or perhaps you were very busy and forgot to execute the instrument. Whatever the case, please find enclosed another copy of the instrument. Kindly complete and return it in the envelope provided so that the data analyses can proceed. To assure anonymity, please do not identify yourself when completing the instruments.

Thank you for your cooperation.

Sincerely,

Greg I. Okoro

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