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Women in Educational Leader Positions: An Investigation of Some Common Factors in Socialization, Educational Background, and Career Commitment

Elaine Barr Morris

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WOMEN IN EDUCATIONAL LEADER POSITIONS:
AN INVESTIGATION OF SOME COMMON
FACTORS IN SOCIALIZATION,
EDUCATIONAL BACKGROUND,
AND CAREER COMMITMENT

by

Elaine Barr Morris

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Education
Department of Educational Leadership

Western Michigan University
Kalamazoo, Michigan
August 1982

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The purpose of this study was to compare the socialization process, educational backgrounds, and career commitments of women in educational leader positions with women in education who had not attained leader positions. The possibility that differences exist in those areas that have set some women apart and have resulted in their pursuit and attainment of administrative positions was explored.

Fifteen hypotheses were constructed to investigate relationships between a woman's attainment of an administrative position and the following variables: (a) career status of her mother during her childhood, (b) childhood experiences similar to males, (c) educational level of her father, (d) order of birth, (e) sex of siblings, (f) family size, (g) age of career decision, (h) elementary and secondary school achievement, (i) type of college attended, (j) undergraduate major, (k) highest degree held, (l) hours invested on career-related activities, (m) involvement in career-related activities, (n) goals for career advancement, and (o) action toward attaining those goals.

Two groups of subjects were randomly selected from the population of Michigan's professional women educators. The administrators'
group members (n = 100) were women holding administrative positions in public school districts. The teachers' group members (n = 303) were women employed in nonadministrative positions and holding current certification. The return rate was 88% for administrators and 67% for teachers.

Members of each group completed questionnaires developed by the researcher. Questions were designed to provide information about the subjects, their early socialization, educational backgrounds, and commitments to career. They could be answered by choosing from a list of alternative responses. Questionnaires were mailed to each group of subjects. Nonrespondents received a postcard reminder 2 weeks later.

Significant differences between administrators and teachers were found for eight hypotheses. When compared to women teachers, women administrators: (a) more often had childhood experiences similar to those of males, (b) made career decisions later, (c) were higher achievers, (d) held higher degrees, (e) were involved in more career-related activities, (f) invested more time on career-related activities, (g) had specific career goals, and (h) were acting on those goals.

It was concluded that the women in this study had a great degree of control over their destinies. "Accidents of birth" apparently had little to do with the attainment of leadership positions.
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WOMEN IN EDUCATIONAL LEADER POSITIONS: AN INVESTIGATION OF SOME COMMON FACTORS IN SOCIALIZATION, EDUCATIONAL BACKGROUND, AND CAREER COMMITMENT

Western Michigan University

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Elaine Barr Morris
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CHAPTER I

THE PROBLEM AND ITS BACKGROUND

In the past decade of equal rights and affirmative action, one would have expected that women would be filling administrative openings at an unprecedented rate. Terborg (1977) found that women in the business world were being given increasing opportunities, but Baron (1977) charged that businesswomen were not much better off than they were in the late sixties and early seventies. Women who had attained management posts were more frequently found in the service industries and were more likely to remain in first-level management positions or slightly above.


Statement of the Problem

The purpose of this study was to compare the socialization process, the educational background, and the career commitment of women in educational leader positions with similar characteristics of women
in education who had not attained leader positions. The study explored the possibility that differences exist in socialization, education, and career commitment which, in total, set some women apart and resulted in their pursuit and attainment of these positions.

For the purpose of this study, socialization refers to "the whole process by which an individual, born with behavioral potentialities of an enormously wide range, is led to develop actual behavior which is confined within a much narrower range--the range of what is customary and acceptable for him according to the standards of the group" (Child, 1954, p. 655). In short, the socialization process is the sum total of those events and circumstances, planned and unplanned, which form an individual's values, motives, and behavior.

Educational background refers to degrees held, areas of specialization, and the type of university attended. Career commitment refers to time investment, committee responsibilities, and other professional involvement in activities such as research, consultant services, and program development.

Background of the Problem

Women's role in educational leader positions has been diminishing since World War II (Dale, 1973). The G.I. Bill, which sent thousands of veterans to college, may be partly responsible, as a sizable number of those young men majored in education. Once they entered the teaching profession, many were quickly promoted to better paying administrative positions. The overall effect was to gently nudge women out of the power and policy-making positions in schools (Dale,
Administration of the elementary school provided a graphic example of this trend. At one time, women held major responsibility for teaching and administering the elementary school. These circumstances have rapidly changed during the last several decades. In 1928, 55% of elementary school administrators were female, but by 1958, the number of women in this field had dropped to 36% (Gross & Trask, 1976). More recent figures revealed a continuing decline: Women's hold on elementary schools' administrative positions dropped from 21% in 1971 (Gross & Trask, 1976) to 19.6% in 1973 (Kaye, 1975).

National figures (for the 41 states and the District of Columbia that differentiated between male and female staff) revealed that, while 65% of the classroom teachers were women in 1977-78, fewer than 19% of all administrators were women (Foster & Carpenter, 1979). Women accounted for about 14% of the principals and assistant principals, very few of whom were in high schools. Representation was even less at the top of the administrative ladder: Approximately 5% of all superintendents and assistants were women in 1977-78.

Figures for Michigan were similar to those reported for the nation. In the elementary school, 84% of the classroom teachers were female, but 80% of the principals were male in 1975-76. Fewer than 3% of secondary principals were female in the same year (Wing, 1979). Michigan Department of Education figures revealed that women represented less than 17% of local and intermediate school district administrators in 1978-79, down from 24% in 1964. Only six women were superintendents for the nearly 600 Michigan school districts.
Statistics gathered in 1976-77 by the State Board of Education indicated that, overall, women administrators had more experience in education, were somewhat older, but were paid less than their male counterparts. Degrees held by males far outranked and outnumbered those held by females, however. Oddly, the decline of Michigan women in educational administration continued at the same time more women were being elected members of the school boards who hire administrators. The Michigan Association of School Boards reported that 11% of its members were women in 1972, 16% in 1975, and 25% in 1977 (Russell, 1978).

Clear-cut and definitive reasons for this continuing decline are not known. In a study of the selection of elementary and secondary administrators, Taylor (1973) found that the only factor having significance for hiring was sex. Males were found to ascend to administrative positions after an average of 15 years of teaching experience (Gross & Trask, 1976). Kaye (1975) reported that very few women apply for administrative positions.

Some research has indicated that women are excellent prospects for administrative positions. Two studies conducted in Florida (Grobman & Hines, 1956; Wiles & Grobman, 1955) investigated male and female leader behavior. The researchers developed test situations to which principals were asked to react. Results of these studies indicated that women operated democratically (defined by the researchers...
as the most desirable style) more often than did men. As cited in Dale (1973), Hemphill, Griffiths, and Frederiksen identified other strengths that women principals were found to possess to a greater degree than did men principals. These were: (a) the ability to work with teachers and outsiders; (b) a concern for teaching objectives, pupil participation, and the evaluation of learning; and (c) the ability to gain positive reactions from teachers and superiors (p. 126). These findings were not compatible with traditional viewpoints, as became evident from the results of the following studies.

Uehling (1973) reported that Basil conducted a questionnaire study of management women and their supervisors (p. 4). Each group was asked to list the personal characteristics that they valued in leaders. Characteristics identified were similar for each group. The four characteristics ranked as most important were not judged by either group to be descriptors of women. In his study of middle managers in nine insurance companies, Schein found that there was a positive correlation between characteristics attributed to successful middle managers. Correlation of women’s characteristics with those of successful managers was found to be negative (Uehling, 1973, p. 5).

Over 100 first-level management males and females were studied by Deaux (1974) in two samples drawn from a Southern telephone company and a California retail chain store. The matched male and female subjects were given questionnaires and rating scales to identify success factors, job satisfaction, and the characteristics relevant to their job performances. Results indicated that male and female managers were similar in most areas. However, two areas of difference
were reported: (a) females consistently rated their abilities and performances lower than males rated theirs, and (b) females less frequently attributed their success to ability.

Uehling (1973) discussed the attitudes of women managers about themselves and the attitudes of others toward them. She suggested that though external factors—such as the type of industry, type of job, and attitudes of management toward women—may limit female accessibility to managerial positions, access may also be limited by internal constraints such as lack of motivation, fear of success, or the possession of personality characteristics not compatible with a managerial post. Women have been described as conditioned to avoid success (Zakrajsek, 1976). The family, school, church, and society at large have dictated proper female behavior.

Lockheed (1975) described the process that she believed had prevented women from occupying more than a few professional or leader positions. Traditionally, in American culture, less worth is ascribed to females than males in the system of sociocultural values. Additionally, in most cultures, the young are socialized to believe that both social and occupational roles are differentiated by sex. Included within the set of roles typically assigned to males are the professional and leader roles (p. 4). In introducing research papers presented in a symposium at the American Educational Research Association annual meeting, Lockheed (1975) suggested that:

Unless specific steps are taken at the sociocultural, the institutional, or the peer level, to intervene against commonly held and widely shared beliefs about the relative value and competence of women, then professional socialization will tend to replicate existing patterns of
inequity between men and women. (p. 8)

One step toward better understanding women in leader positions and the problems that they must overcome is the development of further research studies, or observations. In a position paper prepared by the National Conference on Women in Educational Policy Making (Hierarchy, Power, and Women in Educational Policy-Making, 1975), it was suggested that women become expert "participant-observers" of the institutions for which they work and compile handbooks and case studies of their actual experiences with power structures and leader styles.

Some of the literature suggested that women in management and educational leader positions possess some common characteristics and backgrounds (Arter, 1972; Hennig & Jardim, 1977; Woods, 1975). There was also some indication that the effects of early socialization could be altered in later life (Epstein, 1974).

In summary, though a majority of teachers were women, few of them attained leader positions and, in fact, the number of women occupying administrative positions was declining. Reasons for this trend were not clear, but it appeared that both internal and external constraints may limit female accessibility to managerial positions.

Significance of the Problem

A search of the literature indicated that little scientifically researched data or other information was available on women in educational administration. This was particularly true for women administrators at the elementary and secondary school levels. No studies
were found that had been designed to compare and contrast women school administrators with the group of women teachers from whom they had emerged. Specific data related to their socializations, educational backgrounds, and career commitments were lacking.

The intent of this study was to identify and present data related to the qualities and environments that were conducive to success for women in educational leader positions. It was believed that this information might help the aspiring woman administrator to understand where she had come from and how her socialization and other factors may have affected her. With increased understanding, she might be in a better position to shape her future. Opportunities could be seized for acquiring the requisite knowledge and skills, thus making it possible for her to better compete for administrative positions.

In the following section, 15 research hypotheses are stated which were developed as a tool to gain information about the problem. They were the direct result of the review of related literature that will be presented later in this study.

Statements of Hypotheses

As the result of a number of studies which indicated that socialization, type and quality of education, and career commitment had, in some instances, been unique for women who held leader positions in business and education, it was conjectured that these same factors would prove to be atypical when women in educational administration were compared to nonadministrative women in education. Specific
research hypotheses were categorized as relating to: (a) socialization, (b) educational background, and (c) career commitment.

**Socialization**

Factors in early socialization appeared to sometimes differentiate women who aspired to and attained leader positions from women who were not in leader positions.

1. When compared to women teachers, women in educational administration differed in regard to their mothers' employment status during the administrators' childhoods.

2. When compared to women teachers, women in educational administration more often have childhood experiences similar to those typical for males.

3. When compared to the fathers of women teachers, the fathers of women in educational administration have higher levels of education.

4. When compared to women teachers, women in educational administration more often are the eldest among a family's children.

5. When compared to women teachers, women in educational administration more often have only female siblings.

6. When compared to women teachers, women in educational administration are more likely to have been reared in small families.

7. When compared to the age at which women teachers decided to make careers in education their goals, women in educational administration make the decision to seek careers in administration at a later age.
8. When compared to women teachers, women in educational administration have records of higher achievement in elementary and secondary schools.

**Educational Background**

The type and quality of education that a woman had may have been a factor in her attainment of a leader position.

9. When compared to women teachers, women in educational administration more often have attended large, coeducational colleges or universities.

10. When compared to women teachers, women in educational administration more often have undergraduate majors in traditionally "male subjects," such as business, math, or science.

11. When compared to women teachers, women in educational administration differed in regard to the level of academic degrees attained.

**Career Commitment**

The commitment one has demonstrated to a career may have increased the likelihood of being considered for an administrative post.

12. When compared to women teachers, women in educational administration invest a greater number of after-work hours on career-related activities.

13. When compared to women teachers, women in educational administration are more involved in career-related activities.
14. When compared to women teachers, women in educational administration are more likely to have set specific goals for career advancement.

15. When compared to women teachers, women in educational administration are more likely to be taking specific steps toward their career goals.

These research hypotheses were designed to reveal differences between women in educational administration and women teachers in regard to the socialization process experienced, educational backgrounds acquired, and career commitments made.

Organization of the Study

Chapter I presents an introduction to the study. It provides a statement of the problem, background of the problem, significance of the problem, the research hypotheses, and the organization of the study.

Chapter II presents the review of selected related literature. Included are discussions of socialization and achievement orientation, educational background, and career commitment.

Chapter III presents the design of the study. The discussion includes a description of the population and sample, a description of the instrument, the methodology, and the analysis of the data.

Chapter IV presents the findings of the study. It specifically discusses the characteristics of the respondents and presents the results of the data analyses and hypotheses testing.
Chapter V summarizes the study and presents conclusions about both the respondents and the hypotheses. In its final section, recommendations for future research are offered.
CHAPTER II
REVIEW OF SELECTED RELATED LITERATURE

In the past decade, much had been written about women, but few research studies were available on those women who had attained educational leader positions. Existing studies most often compared men with women or discussed administrative positions in higher education. To provide a better understanding of women in leader positions, this literature review included related studies of women in management. Research interest regarding women in management is relatively recent, much occurring since the passage of the Equal Employment Opportunity Act of 1972. In a review of recent literature about women and the psychological processes surrounding their integration into management (Terborg, 1977), it was concluded that women were being given increasing opportunities in the business world. However, discrimination continued to be reported in both overt and subtler forms.

The literature review consists of three main topics that relate to this investigation: (a) socialization, (b) educational background, and (c) career commitment.

Socialization

As cited in Lockheed (1975), Safilios-Rothschild reported that little cross-cultural research had been done on sex-role socialization. Three major types of change, however, had been documented as significantly affecting women's options. Those were: (a) a shift in
political ideology that entails social equality as its basic principle, such as the Marxist and Maoist sociopolitical theories, (b) a major ideological change that was initiated by a social movement, like the Women's Liberation Movement in the United States, or (c) a crisis, such as war or revolution, especially if its result is the creation of a manpower shortage (pp. 9-10).

According to traditional Freudian psychological theory, women are expected to be submissive and nurturing instead of aggressive and conceptualizing (Hierarchy, Power, and Women, 1975). Shapiro (1975) reported that both traditional psychological theory and contemporary clinical attitudes suggest that psychology continues to view women negatively. She stated that this view reflects that of society as a whole, in which women "are seen first and foremost as wives and mothers" (p. 52).

Sex-Role Stereotyping

A group of researchers found sex-role stereotypes to be shared by both sexes (Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972). Both men and women described women as less competent, less objective, and less logical than men. However, women were perceived as having greater interpersonal sensitivity, warmth, and expressiveness. In addition, both sexes judged those traits identified as "masculine" as the more desirable. Such pervasive cultural stereotypes must be overcome if women are to successfully enter leader roles.
In a study conducted by Hawley (1971), a positive relationship was found to exist between a woman's perception of the sex stereotypes held by men and the woman's own role expectations and behaviors. This could result in real and/or perceived pressures from others, and from the woman herself, to sacrifice her career.

Dale (1973) reported several occurrences of young women who were pressured by high school teachers, parents, professors, colleagues, and organizations to alter career aspirations. Hackamack and Solid (1972) made similar observations and suggested that counselors discouraged females from training for "important" careers. At least three research studies supported these allegations. Weisman, Morlock, Sack, and Levine (1976) found differentiated counseling of men and women who were denied entry into medical school. Women were encouraged to pursue less ambitious and more traditional roles, while men were often directed to try other schools or for Ph.D.'s in another field. In a study of high school counselors, Ahrons (1976) found a bias concerning the "career woman concept" and concluded that counselors with such biases might discourage women from the choice of nontraditional careers. In a study of high school students, both males and females were found to have similar aspirations, but males reported both more interest in pursuing, and more pressure from parents to pursue, career choices (Goodale & Hall, 1976).

According to Lockheed (1975), a woman who disregarded cultural norms by attempting to assume a professional or leader role was often viewed as engaging in deviant behavior. When this occurred, parents, teachers, or others may have stepped in to attempt to correct the
behavior, as was indicated above. Should their attempts have failed, and the woman have achieved the desired position, a sociocultural value may have again become apparent: "Both the deviant woman and her male colleagues . . . tend to believe that the males are more competent at their professional activity than are the females" (p. 5). Thus, the woman may have achieved professional standing, but she was unlikely to become a leader among her male peers.

Achievement Orientation

By early elementary school, children have begun to identify the achievement areas that are appropriate to each sex, and these are well established by adolescence. Research reported by Stein and Bailey (1973) indicated that social, verbal, and artistic skills were considered feminine; interest and ability in the natural sciences, athletic, mechanical, and spatial skills were considered masculine. There was further evidence that females attached more importance to performing well and were more likely to expect success on those skills that were considered feminine (p. 347). Feminine personality attributes such as nonassertiveness, avoidance of competition, and dependency were in conflict with achievement, both in school and on the job (p. 350). Those attributes associated with achievement were emotional independence, assertiveness, and competitiveness (p. 359).

As cited in Terborg (1977, p. 648), a review of sex differences by Maccoby and Jacklin concluded that self-confidence was the one achievement-related characteristic that consistently differentiated males and females. Horner (1972) discussed "fear of success," a
trait assumed to be typically present in women, but absent in men. Horner concluded that this characteristic acts to inhibit women's performances on achievement-related tasks. More recent research (Tresemer, 1974) suggested that caution be taken when viewing Horner's conclusions, as additional studies did not fully support his generalizations.

Baron (1977) observed that the seven descriptors used by Argyris to describe immaturity on his immaturity-maturity continuum were the same factors that typically had been used to describe women. Those descriptors were passive, dependence, behave in few ways, erratic, and shallow interests, short time perspective, subordinate position, and lack of awareness of self.

Women in the executive ranks are apparently motivated by factors similar to those motivating men. Morrison and Sebald (1974) conducted a study of the personal characteristics differentiating 39 pairs of executive and nonexecutive women. The executive group was found to be significantly higher on the need for self-esteem, the need for power, and the possession of mental ability. In Walt's (1962) study of 50 women occupying high-level professional positions in the government, it was concluded that feelings of achievement, responsibility, and recognition were motivators for these women. Mattes and Watkins (1973) found that women administrators had a view of human nature that was closer to the norm for men than to the norm of other women.

Pfiffner (1975) investigated top level women administrators in 92 California community colleges. The researcher found that parents

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played influential roles in the lives of these women. Some research
(Almquist, 1974; Vogel, Broverman, Broverman, Clarkson, & Rosenkrantz,
1970) found that the early rejection of stereotyped sex-roles may
affect later career decisions. Women who chose nontraditional roles
were found to have been raised more frequently in families in which
the mothers had full-time jobs. It was suggested that differentiated
sex-role stereotypes were less likely to develop when both parents
shared in support and household work. Thus, the presence of an
achieving maternal model appeared to encourage similar achievement
related behavior for females. Banducci (1967) found that, for middle-
class families, there was a positive relationship between maternal
employment and high educational and occupational aspirations for
young females. Less traditional feminine interests were found by
Douvan and Adelson (1966) among daughters of working mothers.

Arter (1972) created a profile based on 101 women holding admin-
istrative positions in state universities and land-grant colleges by
using the most frequent responses on a questionnaire. Results of
this study indicated that the typical woman administrator was most
often the first born in a family of two children. Her father was a
professional, and her mother was a housewife. However, in her study
of 25 high-level management women, Hennig (Hennig & Jardim, 1977)
found that each subject's mother, with one exception, was a house-
wife. Based on these studies, Research Hypothesis 1 was formulated:
When compared to women teachers, women in educational administration
differed in regard to their mothers' employment status during the ad-
ministrators' childhoods.
There is some evidence that women who are high achievers may identify with the masculine role, though this does not imply lack of identification with the feminine role (Stein & Bailey, 1973). In Banfield's (1976) study of women in middle management, 27 subjects were selected from diverse organizational settings and were administered an instrument designed to identify androgynous personality characteristics and self-concept. Most of the subjects incorporated masculine characteristics into their personalities to some degree; 63% were classified in masculine categories, and approximately 30% in androgynous categories. Those who were classified in the latter category may well have utilized the Androgynous Management Style, described by Baron (1977) as a blending of the most human characteristics of both men and women, producing a style that is creative, strong, capable, and humanistic.

A father's encouragement of and participation in achievement efforts with his child were found to be positively related to the child's strivings in a study by Crandall, as cited in Stein and Bailey (1973, p. 360). And finally, Hennig and Jardim (1977) reported the results of interviews with 25 top level management women in business. Each woman recalled a special relationship with her father, often sharing interests and activities that would have traditionally been shared by fathers with their sons. In late adolescence, each developed close relationships with male peers. Research Hypothesis 2 was based on the preceding studies: When compared to women teachers, women in educational administration more often have childhood experiences similar to those typical for males.
The father's type of employment (and, by implication, his educational background) was also found to be significant by Arter (1972) in her study of administrative women in higher education. Typically, the fathers of these women were professional men. In her comparison of 150 women in business administration to 150 women in educational administration, Benedetti (1975) also found that a woman in educational administration was more likely to have a father who was employed in a profession. Hennig and Jardim (1977) reported that the father of each subject they interviewed had held a managerial or an administrative position. Thus, Research Hypothesis 3 was formulated: When compared to the fathers of women teachers, the fathers of women in educational administration have higher levels of education.

Order of birth proved to be significant in some studies. In her study of women student personnel administrators, Schlack (1974) found that oldest children and oldest female children scored higher on the "Structure" dimension of the Leadership Opinion Questionnaire than did children who occupied later family positions. The "Structure" dimension is a reflection of a respondent's emphasis on task accomplishment.

Once again Hennig's subjects are of interest—each was the eldest child in her family (Hennig & Jardim, 1977). As mentioned earlier in this paper, Arter (1972) also reported that the women administrators she studied were most often first born. As a result of these studies, Research Hypothesis 4 was formed: When compared to women teachers, women in educational administration more often are the eldest among a family's children.
In their study of the socialization of political women, Kelly and Boutilier (1978) found that the presence of brothers, especially older brothers, seemed to inhibit intense involvement in political activity. They speculated that having only female siblings provided an "opportunity structure for girls" (p. 440). Hennig's findings appear to support this speculation. Each of the subjects she interviewed (Hennig & Jardim, 1977) had only female siblings. Research Hypothesis 5 was generated by the above studies: When compared to women teachers, women in educational administration more often have only female siblings.

Safilios-Rothschild (1975) reported that in Greek middle- and upper-middle-class families with one or two female offspring, girls are socialized without much regard to sex role stereotypes. These girls, who are expected to carry on the family name, "are socialized to high achievement through their parents' high educational and occupational expectations as well as through continuous encouragement and support" (p. 15). Families of no more than two or three children were reported by both Hennig and Jardim (1977) and Arter (1972) as the norm for the women administrators they studied. From these findings Research Hypothesis 6 was generated: When compared to women teachers, women in educational administration are more likely to have been reared in small families.

The decision to seek an administrative career was found in two studies to have been made rather late. In a research study begun in 1973, Hennig and Jardim (1977) interviewed in depth 100 low-to-high level management women. The study revealed that the decisions to
have careers were made relatively late, at age 30 to 33. Sixty-nine women in leader positions in California school districts also reported that their goals concerning administrative assignments were gradually formulated after they became teachers (Burns, 1964). Based on these studies, Research Hypothesis 7 was formulated: When compared to the age at which women teachers decided to make careers in education their goals, women in educational administration make the decision to seek careers in administration at a later age.

Stein and Bailey (1973) reported longitudinal studies of children which indicated that the patterns of achievement and independence that were established during middle childhood and early adolescence were predictive of adult achievement and independence for females. When females defined achievement as feminine, they were more likely to exhibit behavior that would result in achievement. College women with this nontraditional sex-role concept were found by Lipman-Blumen (1972) to have higher educational aspirations than college women with more traditional views.

Hennig (Hennig & Jardim, 1977) found highly successful women to have had supportive parents who encouraged high achievement. The 25 subjects of her study were high achievers in school and were typically members of organizations and clubs in which they assumed leader roles. This study suggested Research Hypothesis 8: When compared to women teachers, women in educational administration have records of higher achievement in elementary and secondary schools.

Thus, it would appear that one could expect to find specific socialization factors operating among achievement-oriented women.
Those factors presented here have included: (a) the presence of a nontraditional female role model in the form of a working mother, (b) a relationship with the father that provided experiences which would have more traditionally been provided to a son, (c) the presence of a father who was trained for and employed in a profession, (d) the family position of eldest child, (e) having only female siblings, (f) being a member of a small family, (g) making a late decision to pursue a career, and (h) having a record of high achievement in elementary and secondary schools. These are the factors around which Research Hypotheses 1-8 were formed. In the following section the educational backgrounds of women administrators will be examined.

Educational Background

Much of the literature supported a strong educational background, both formal and informal, for women who aspired to leader positions. The term "strong" seemed to imply advanced degrees in areas related to one's work, attendance at a reputable university which was both large and coeducational, and a wide variety of work-related experiences.

Interviews with low-to-high level management women (Woods, 1975) revealed common characteristics which were believed essential for success in a male-dominated world. Participants agreed that a woman aspiring to a managerial position must be competent in her field and have a strong education. It was suggested that participation in management development classes would be viewed positively by superiors. A variety of educational programs was described by Baron (1977) as
being vital to managerial development. Included were company sponsored training programs and the pursuit of advanced degrees. As the result of attending a management development seminar that was designed specifically for women, female employees of a large insurance company realized for the first time the importance of attending company sponsored courses and continuing their formal educations. Many of these women returned to school (Pilla, 1977).

Hennig (Hennig & Jardim, 1977) found that most of the high-level management women who served as the sample in her study had chosen large, coeducational colleges. The preceding suggested Research Hypothesis 9: When compared to women teachers; women in educational administration more often have attended large, coeducational colleges or universities.

In Sundheim's 1963 study, women who chose a "masculine" major in science were found to be more highly motivated toward achievement than were language majors. The language majors were, in turn, found to be more highly motivated than elementary education majors. Hennig's women managers also reported that they had majored in the professionally oriented areas traditionally restricted to males (Hennig & Jardim, 1977). Research Hypothesis 10 was generated by the preceding studies: When compared to women teachers, women in educational administration more often have undergraduate majors in traditionally "male subjects," such as business, math, or science.

Though Baron (1977) advised the pursuit of advanced degrees for women aspiring to managerial positions, other studies indicated a doctoral degree was not vital. Women administrators in higher
education were found less likely to have doctorates than their male peers, and, if a woman had one, it was typically attained at a later age than the average for men (Mattes & Watkins, 1973). Finally, Pfiffner (1975) determined that a doctorate was not necessary for the attainment of top-level administrative positions in California community colleges. These studies led to the formulation of Research Hypothesis 11: When compared to women teachers, women in educational administration differed in regard to level of academic degrees attained.

It appeared that there were several factors in a woman's educational background that may have been predictive of her attainment of a leader position, should she seek one. They were: (a) attendance at a large, coeducational college; (b) an undergraduate major in traditional male subjects, such as science, math, or business; and (c) the attainment of one or more higher degrees, though not necessarily a doctorate. Research Hypotheses 9-11 were formed around these factors. In the next section the career commitments of women administrators will be explored.

Career Commitment

A woman's commitment to her career was the final area investigated in relation to her attainment of a leader position.

The management women who were interviewed by Woods (1975) urged that a woman make an extra effort to demonstrate that she is serious about her career. Many successful women advised that work be given the highest priority and commitment. Each high-level management
woman in Hennig's study reported that she had committed herself fully to her career (Hennig & Jardim, 1977). In the early career years, social activities were curtailed so as to give full attention and extra hours to career advancement.

In a study comparing men and women administrators in schools of education, Mattes and Watkins (1973) found the women to be actively involved in university and school of education committees. They were also involved in non-job-related consultative and public service concerns which demanded additional hours. Affiliation with a professional educational organization was common. The preceding studies suggested two research hypotheses. The first is Research Hypothesis 12: When compared to women teachers, women in educational administration invest a greater number of after-work hours on career-related activities. The second is Research Hypothesis 13: When compared to women teachers, women in educational administration are more involved in career-related activities.

The importance of developing and acting on a career plan which included realistic career goals was discovered by women who participated in the management development seminar discussed by Pilla (1977). Instead of leaving their advancement to chance, those women began taking career directions into their own hands by completing 5-year career plans which weighed costs and benefits. The subjects in Hennig and Jardim's 1973 study also had identified career goals for 5 years in the future, and each viewed her career as an integral part of her life (Hennig & Jardim, 1977). Woods (1975) reported that the management women she interviewed suggested that a specific set of
goals be developed, along with a plan for attaining them. As a result of the preceding studies, Research Hypothesis 14 was formed: When compared to women teachers, women in educational administration are more likely to have set specific goals for career advancement. Research Hypothesis 15 was also suggested: When compared to women teachers, women in educational administration are more likely to be taking specific steps toward their career goals.

A commitment to her career seemed to be a descriptor for the woman who had attained a leader position. Specific factors that may have increased her opportunities for advancement were: (a) the investment of after-work hours on career related activities, (b) involvement in a variety of career related activities, (c) the formulation of specific goals related to her career advancement, and (d) action toward those goals. These are the factors around which Research Hypotheses 12-15 were formed. A summary of the research hypotheses follows in the final section.

Summary of Research Hypotheses

There appeared to be some factors that differentiated women in leader positions in business and education from women in business and education who had not attained leader positions. Of primary interest to the present study were the socialization process, educational background, and career commitment. The statements of hypotheses listed in Chapter II were grouped around these three areas. They are briefly restated below.
Fifteen hypotheses were constructed to investigate the possible relationships between a woman's attainment of an administrative position and the following variables: (a) career status of her mother during her childhood, (b) childhood experiences resembling the pattern for males, (c) educational level of her father, (d) order of birth, (e) sex of siblings, (f) family size, (g) age of career decision, (h) achievement in elementary and secondary schools, (i) type of college attended, (j) undergraduate major, (k) highest degree held, (l) hours invested on career-related activities, (n) goals for career advancement, and (o) action toward those goals.

In Chapter III the design of the study is presented. The reader will have the opportunity to take an in-depth look at the population sampled, the instrument, the methodology used in the study, and the plan for data analysis.
CHAPTER III

DESIGN OF THE STUDY

This chapter examines the research methodology that was imple­mented as the study progressed. The following discussion includes descriptions of the population, the instrument, design and procedures, and the methods of analysis.

Population and Sample

Subjects for each of two randomly formed groups were selected from the population of professional women educators in Michigan. Members of the administrators' group were women who were listed in the 1979 issue of Michigan Education Directory and Buyer's Guide as holding administrative positions in public school districts at the time of the survey. The names of women administrators were identified and each was assigned a three-digit number, beginning with 001. Names that could have belonged to either men or women were omitted. The names of women administrators from the researcher's school district were also omitted, as each of these women had previously participated in the pilot study and was somewhat familiar with the study and its hypotheses. A table of random numbers was used to select 100 subjects for the administrators' group.

Members of the second group were women who were employed by public school districts in nonadministrative positions and who held current certification, according to the Michigan Department of
Education's Register of Professional Personnel. The women in this group included teachers, counselors, consultants, and other professional certified staff. For simplicity, members of this group are identified as "teachers" in this study. This register which was available on microfiche at the Michigan Department of Education, Office of Teacher Preparation and Certification, is updated annually and included certified personnel who were employed in public school or intermediate school districts during the 1978-79 school year. Assignment and sex were coded, so it was possible to reliably eliminate administrators and men from this sample.

The Register of Professional Personnel listed approximately 110,000 names on a total of 2,124 pages. The following procedure was used for the systematic sampling of that register. Of the first 10 pages, one page was randomly selected to begin the sample. Starting at the top of that page, the first qualifying female name was chosen. Thereafter, the first qualifying name from every seventh page was chosen. Using this procedure of systematic sampling, 303 subjects, were selected. Names and school districts were noted for the mailing of the questionnaires.

Using the methods of systematic and random sampling described above, women educators from 177 Michigan communities and 12 intermediate school districts were selected. So as to facilitate the comparison of the samples to those of possible future studies and to see if they were representative of the state of Michigan, the researcher categorized subjects according to geographic location and community size. The six categories that resulted were subsumed under
two large groups, comprised of the metropolitan Detroit area and the remaining "outstate" areas. In the latter group, respondents were also classified according to size of community. In addition, a separate category was created for the subjects employed by one of Michigan's intermediate school districts. This information is summarized in Table 1.

Table 1
Percent of Sample According to Locale and Size of Community

<table>
<thead>
<tr>
<th>Group</th>
<th>Nonadministrative subjects (n = 303)</th>
<th>Administrative subjects (n = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detroit area:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detroit</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Suburbs</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>Outstate area:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60,000 +</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>10,000 to 59,999</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>1,000 to 9,999</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>999 and fewer</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Intermediate school districts</td>
<td>4</td>
<td>--</td>
</tr>
</tbody>
</table>

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Instrument

Members of each group were each asked to complete a questionnaire developed by the researcher. The questionnaires for the two groups were similar, but not identical (see Appendices E and G for samples). In general, each was comprised of four types of questions. They were: (a) informational questions, answers to which would describe the subjects; (b) questions related to family and early socialization; (c) questions related to the educational background of the subject; and (d) questions designed to indicate the degree of the respondent's career commitment and involvement. The major questions related to this study's hypotheses and were derived from the literature. Content validity will be established in the section "Methods of Analysis" later in this chapter. The questions were designed so they could be answered by choosing from a list of alternative responses.

The questionnaires were pretested in a pilot study that used small samples of the intended populations. The pilot cover letter, teacher questionnaire, and administrator questionnaire are included respectively in Appendices A, B, and C. Several minor revisions were made for purposes of clarification and consistency. With one exception, the revisions did not affect the content, but were related to readability and ease of administrative procedures. One item that was inadvertently omitted from the teacher questionnaire on the pilot was included for the revised survey. A second item not related to the hypotheses was added since its omission had raised questions from
several of the pilot-study respondents. All of the changes were based on the tabulated results and on written comments that were solicited by the researcher in the cover letter to pilot-study subjects.

Design and Procedures

Ten women administrators and 30 women teachers were selected from the researcher's school district for use in a pilot study to pretest the questionnaires. Pilot study questionnaires and cover letters were distributed in early September 1979. The questionnaires were coded for follow-up purposes. Code numbers were deleted from the questionnaires as responses to the items were recorded. Comments and areas of apparent confusion were noted. Results of the pilot study were used to revise the questionnaires in preparation for the actual study.

Copies of each revised questionnaire and its cover letter, as well as an envelope addressed to the researcher, were reproduced by a commercial printer. Each questionnaire was in a single page fold-over format, the four sides of which are reproduced in Appendix E and Appendix G. Self-adhesive address labels were prepared by a typist for the mailing to the 100 administrators and 303 teachers.

On October 31, 1979, the questionnaires were mailed to each group of subjects. The packet for each group was comprised of a cover letter (see Appendices D and F), the questionnaire, and the stamped return envelope. The cover letters, which used the letterhead of Western Michigan University's Department of Educational
Leadership, explained the purpose of the study and why each individual's response was important. Each cover letter was signed by the researcher and her university advisor. Confidentiality of the responses was emphasized on the directions for completing the questionnaires. Each questionnaire was coded for follow-up purposes. The code number was deleted from each questionnaire as soon as a record was made that it had been received.

Approximately 2 weeks after the mailing of the questionnaires, postcards (see Appendix H) were sent to those subjects who had not yet responded, reminding them to return their questionnaires. Receipt of the postcards apparently encouraged 16% of the final number of respondents to return their completed questionnaires. A total of 90 administrators and 207 teachers eventually responded by the January 1980 cut-off date.

Responses from the individual questionnaires were coded in preparation for keypunching. Data were analyzed using appropriate computer programs for statistical analyses. Data analysis techniques are discussed fully in the following section.

Methods of Analysis

In this section, the questions used to gather data for testing each hypothesis will be identified. The statistical test or tests that were used for data analysis will be noted.

The level of significance for testing each hypothesis was set at .10. This meant that a probability of .10 of committing a Type I error would be allowed when testing the hypotheses.
Hypothesis 1 was related to the employment status of a subject's mother. The formulation of Question 16 (see Appendices E and G) resulted from studies by Adelson (1966), Almquist (1974), Arter (1972), Banducci (1967), Hennig and Jardim (1977), and Vogel et al. (1970). Hypothesis 1 was tested by comparing the responses to Question 16 on both the teacher and administrator questionnaires. With the exclusion of Choice 3 (other), this item became dichotomous and was analyzed using the chi-square test of independence.

Hypothesis 2 was related to the nature of childhood experiences. The formulation of Question 23 (Appendices E and G) was suggested by studies reported by Hennig and Jardim (1977) and Stein and Bailey (1973). Hypothesis 2 was tested by comparing the responses to Question 23 on both the teacher and administrator questionnaires. Positive responses (checks) for Choices 1-8 were counted for each questionnaire, resulting in a score of from 0 to 8. This item was analyzed using the t test for independent means. In addition, frequency tables for the responses of teachers and administrators were generated for each choice, 1-8.

Hypothesis 3 was concerned with the level of a father's education. Studies reported by Arter (1972), Benedetti (1975), and Hennig and Jardim (1977) suggested Question 18 (Appendices E and G). Hypothesis 3 was tested by comparing the responses to Question 18 on both the teacher and the administrator questionnaires. It was possible to combine responses to Choices 1 and 2, and to Choices 3-5 since the information of interest to this study was a high school education or less or more than a high school education.
Hypothesis 4 was generated by the literature concerning order of birth. Related studies by Arter (1972), Hennig and Jardim (1977) and Schlack (1974) suggested Question 21 (Appendices E and G). Hypothesis 4 was tested by comparing the responses to Question 21 on both the teacher and administrator questionnaires. This item was dichotomized, with one category including Choices 1 and 4 and the second category including Choices 2 and 3. It was reasoned that the experiences of a child whose elder siblings were more than 5 years older would have been similar to those of an eldest child. The chi-square test of independence was used for analysis.

Hypothesis 5 was related to having only female siblings. The formulation of Question 20 (Appendices E and G) resulted from studies by Hennig and Jardim (1977) and Kelly and Boutilier (1978). Hypothesis 5 was tested by comparing the responses to Question 20 on both the teacher and administrator questionnaires. The chi-square test of independence was used to analyze the data.

Hypothesis 6 was related to family size. Question 19 (Appendices E and G) were suggested by studies reported by Arter (1972), Hennig and Jardim (1977), and Safilios-Rothschild (1975). Hypothesis 6 was tested by comparing the responses to Question 20 on both the teacher and administrator questionnaires. Of interest to this study was a small family (two or fewer children) as opposed to a larger family (more than two children). Thus, this item was dichotomized, with one category including Choices 1 and 2 and the second category including Choices 3 and 4. The chi-square test of independence was used for analysis.
Hypothesis 7 was concerned with the age of career decision. Studies reported by Burns (1964) and Hennig and Jardim (1977) suggested Question 6 (Appendices E and G). Hypothesis 7 was tested by comparing the responses to Question 6 on both the teacher and administrator questionnaires. Of interest to this study was whether the career decision was made prior to or after the completion of college. Therefore, this item was dichotomized, with one category including Choices 1, 2, and 3 and the second category including Choice 4. Responses to Choice 5 were dropped from the analysis, as the focus of this hypothesis was on age of career choice rather than on whether or not a choice were being pursued. This reduced the sample size on this item. The chi-square test of independence was used for the analysis.

Hypothesis 8 was related to level of academic achievement in elementary and secondary schools. Question 22 (Appendices E and G) was suggested by a study reported by Hennig and Jardim (1977). Hypothesis 8 was tested by comparing the responses to Question 22 on both the teacher and administrator questionnaires. Of interest to this study was outstanding academic achievement (A's or mostly A's) as opposed to lesser academic achievement (B's or less). Therefore, this item was dichotomized with one category including Choices 1 and 2 and the secondary category including Choices 3 and 4. Responses to Choice 5 were dropped from the analysis as the interest was in a standard system of grading. This reduced the sample size on this item. The chi-square test of independence was used for the analysis.
Hypothesis 9 was related to the nature of the undergraduate college attended. Hennig and Jardim (1977) reported a study which suggested Question 9 and 10 (Appendices E and G). Hypothesis 9 was tested by comparing the responses to Question 9 and 10 on both the teacher and administrator questionnaires. Of interest to this study were positive responses to both Choice 1 on Question 9 and Choice 4 on Question 10. Such responses indicated attendance at a large, public (coeducational) college and were included in one category. All other combinations were included in the second category. The chi-square test of independence was used for the analysis.

Hypothesis 10 was concerned with a subject's undergraduate major. Studies reported by Sundheim (1963) and Hennig and Jardim (1977) suggested Question 8 (Appendices E and G). Hypothesis 10 was tested by comparing the responses to Question 8 on both the teacher and administrator questionnaires. This item was dichotomized, with one category including Choices 1, 2, 6, 7, or 8 (representing majors "acceptable" for women) and the other category including Choices 3, 4, or 5 (representing subjects in which males typically major). These data were analyzed using the chi-square test of independence.

Hypothesis 11 was related to a subject's highest academic degree attained. The formulation of Question 7 (Appendices E and G) was suggested by studies reported by Mattes and Watkins (1973), Pfiffner (1975), and Baron (1977). Hypothesis 11 was tested by comparing the responses to Question 7 on both the teacher and the administrator questionnaires. The chi-square test of independence was used for the analysis.
Hypothesis 12 was concerned with the amount of time invested on career-related activities. Studies reported by Mattes and Watkins (1973) and Hennig and Jardim (1977) suggested Question 13 (Appendices E and G). Hypothesis 12 was tested by comparing the responses to Question 13 on both the teacher and administrator questionnaires. This item was dichotomized, with the first category including Choices 1 and 5—choices indicating little or no time spent on career-related activities. The second category included Choices 2, 3, and 4—choices indicating a greater time involvement in career-related activities. The chi-square test of independence was used for the analysis.

Hypothesis 13 was related to involvement in a variety of career-related activities. Studies reported by Mattes and Watkins (1973) and Hennig and Jardim (1977) suggested Question 12 (Appendices E and G). Hypothesis 13 was tested by comparing the responses to Question 12 on both the teacher and administrator questionnaires. Positive responses (checks) for Choices 1 through 6 were counted for each questionnaire, resulting in a score of from 0 to 6. Responses to Items 7 and 8 were dropped from the analysis, as they were not pertinent to this study. In addition, frequency tables were generated for the responses of teachers and administrators to each choice, 1 through 6, for informational purposes.

Hypothesis 14 was related to whether or not career goals had been established. The formulation of Question 14 (Appendices E and G) was suggested by studies reported by Woods (1975), Hennig and Jardim (1977), and Pilla (1977). Hypothesis 14 was tested by
comparing the responses to Question 14 on both the teacher and administrator questionnaires. In coding responses to this question, the researcher created two additional choices because of multiple responses or written comments. Choice 6 was created to account for respondents who wanted greater responsibility, but were unsure whether they would seek it within or outside public education. Choice 7 was created for those respondents who expected to be retired in 5 years. This item was finally dichotomized, with one category including Choices 1 and 2 (no goals established) and the second category including Choices 3, 4, and 6 (goals established). Responses to Choices 5 and 7 were omitted as they were not pertinent. The chi-square test of independence was utilized.

Hypothesis 15 was concerned with action on a career plan. Woods (1975) and Pilla (1977) reported studies which led to the formation of Question 15 (Appendices E and G). Hypothesis 15 was tested by comparing the responses to Question 15 on both the teacher and administrator questionnaires. Positive responses (checks) for Choices 2 through 8 were counted for each questionnaire, resulting in a possible score for this question of 0 to 7. This information was analyzed using the t test for independent means. Frequency tables were generated for informational purposes.

Three additional questions were included on both the teacher and administrator questionnaires. Question 11 was informational, and was intended to help describe the subjects' work records. Several respondents to the pilot study asked why the mother's educational level was of no apparent interest since the father's educational level was.
To avoid this controversy, Question 17 was added to each questionnaire. Finally, Question 24 did not relate to a hypothesis, but was included as an informational item to see whether a subject's concept of herself as a child was similar to her concept of herself as an adult.

This chapter has presented the design of the study. Chapter IV will present information concerning who were the respondents in this study. Of greater importance, it will report the results of the data analysis and hypothesis testing.
CHAPTER IV

FINDINGS OF THE STUDY

This chapter reports the findings of the study concerning the socialization process, the educational background, and the career commitment of women in administrative and nonadministrative positions in education. The first section of the chapter will report information about who the respondents were. The second section will report the results of the data analysis and hypotheses testing for the 15 hypotheses offered in Chapter I.

Characteristics of the Respondents

The randomly formed samples of administrators (n = 100) and teachers (n = 303) represented 177 Michigan communities and 12 intermediate school districts. A total of 90 administrators' questionnaires, 88 usable, and 207 teachers' questionnaires, 202 usable, were returned to the researcher. The seven unusable questionnaires were classified as such because the respondents no longer filled the position intended for the sample (e.g., retirements, layoffs, and returning to the classroom). This section will examine the locations and sizes of the respondents' communities, and will look at some personal information that will help us to understand who the respondents were.
Community Size and Location

In order to better understand the subjects studied, the researcher established six categories according to size and location of their communities. When numbers sampled and numbers of returned questionnaires were inserted into these categories, it was possible to establish the rate of return of questionnaires by the community size and location. This information is presented in Table 2.

As the table indicates, the rate of return for both administrative and nonadministrative staff was the lowest for the city of Detroit. Nonadministrative staff from large, outstate communities and from suburban Detroit responded at a lesser rate than other Michigan communities. With the exception of Detroit, the rate of response for administrative staff was consistently high. Overall response to the questionnaires was 71%, with 67% of the teacher sample and 88% of the administrator sample responding.

It was also of interest to examine the percentage of total responses represented by each community category. Table 3 illustrates that approximately a third of the responses for the combined samples were from educators working in Detroit and its suburbs. Educators from outstate communities with populations of between 1,000 and 9,999 accounted for an additional quarter of the responses.

As indicated by the above percentages, the results of this study are more representative of some geographic areas of Michigan than of others. This, of course, is due to the uneven rate of return. Information concerning administrators is most representative of women
Table 2
Rate of Return of Usable Questionnaires by Community Size and Location

<table>
<thead>
<tr>
<th>Community</th>
<th>Group Frequencies</th>
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<td></td>
<td>Teachers</td>
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</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>Mailed</td>
<td>Returned</td>
<td>Percent returned</td>
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<td></td>
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<tr>
<td>Detroit area</td>
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<td>Detroit</td>
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<td>54</td>
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<td></td>
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<td>61</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td>115</td>
<td>69</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outstate, by population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60,000 or more</td>
<td>36</td>
<td>20</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10,000 to 59,999</td>
<td>34</td>
<td>26</td>
<td>76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,000 to 9,999</td>
<td>66</td>
<td>49</td>
<td>74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>999 and fewer</td>
<td>39</td>
<td>28</td>
<td>71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td>175</td>
<td>123</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate school districts</td>
<td>13</td>
<td>10</td>
<td>77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>303</td>
<td>202</td>
<td>67</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrators</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>Mailed</td>
<td>Returned</td>
<td>Percent returned</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detroit area</td>
<td>7</td>
<td>3</td>
<td>43</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suburbs</td>
<td>30</td>
<td>29</td>
<td>97</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td>37</td>
<td>32</td>
<td>86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

44
administrators from outstate and suburban Detroit areas, but less representative of women administrators from the city of Detroit itself. Information concerning teachers can best be applied to women teachers from small and mid-size communities in outstate Michigan. Generalizations drawn from this study should be interpreted with the limitation that the respondents are not representative of the sample; therefore, the sample is not representative of the state.

Table 3

Percent of Subjects Participating in the Study by Community Size and Location

<table>
<thead>
<tr>
<th>Community Type</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teachers (n = 202)</td>
</tr>
<tr>
<td>Detroit area</td>
<td></td>
</tr>
<tr>
<td>Detroit</td>
<td>7%</td>
</tr>
<tr>
<td>Suburbs</td>
<td>27%</td>
</tr>
<tr>
<td>Subtotal</td>
<td>34%</td>
</tr>
<tr>
<td>Outstate, by population</td>
<td></td>
</tr>
<tr>
<td>60,000 or more</td>
<td>10%</td>
</tr>
<tr>
<td>10,000 to 59,999</td>
<td>13%</td>
</tr>
<tr>
<td>1,000 to 9,999</td>
<td>24%</td>
</tr>
<tr>
<td>999 and fewer</td>
<td>14%</td>
</tr>
<tr>
<td>Subtotal</td>
<td>61%</td>
</tr>
<tr>
<td>Intermediate school districts</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>
Personal Information Describing the Subjects

Subjects were asked to respond to several informational questions in the survey. The responses to those questions are presented in this section to help describe the subjects. Employment position, total years in that or a similar position, age, marital status, and the number of children at home are reported for both administrative and nonadministrative staff.

Employment position. Subjects were asked to describe their current employment positions. Table 4 indicates that the majority (69%) of administrators responding were elementary school principals. The largest group (48%) of nonadministrative subjects were elementary school classroom teachers.

Years of service. Subjects were asked to indicate the number of years they had held their current or similar positions. Table 5 indicates that of these administrators, 58% responded that they had held an administrative post for 10 or fewer years; only 35% of the teachers reported 10 or fewer years on the job.

Age. Administrators tended to be older than teachers. Information developed from Table 6 indicates that 78.4% of the administrators were over 40 years of age. Only 47.5% of the teachers were over 40.

Marital status. The majority of both administrators and teachers reported that they were married. A somewhat greater percentage
<table>
<thead>
<tr>
<th>Group</th>
<th>Frequency</th>
<th>Percent of group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administrators</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>61</td>
<td>69.3</td>
</tr>
<tr>
<td>Secondary</td>
<td>3</td>
<td>3.4</td>
</tr>
<tr>
<td>Central office</td>
<td>19</td>
<td>21.6</td>
</tr>
<tr>
<td>Superintendent or asst. superintendent</td>
<td>4</td>
<td>4.5</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>88</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Teachers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary</td>
<td>98</td>
<td>48.5</td>
</tr>
<tr>
<td>Secondary</td>
<td>40</td>
<td>19.8</td>
</tr>
<tr>
<td>Specialist</td>
<td>20</td>
<td>9.9</td>
</tr>
<tr>
<td>Others</td>
<td>44</td>
<td>21.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>202</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 5

Years of Service

<table>
<thead>
<tr>
<th>Years</th>
<th>Group</th>
<th>Administrators</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
<td>Freq.</td>
</tr>
<tr>
<td>Less than 2</td>
<td>5</td>
<td>5.7</td>
<td>5</td>
</tr>
<tr>
<td>2 to 5</td>
<td>21</td>
<td>23.9</td>
<td>25</td>
</tr>
<tr>
<td>5 to 10</td>
<td>25</td>
<td>28.4</td>
<td>41</td>
</tr>
<tr>
<td>More than 10</td>
<td>37</td>
<td>42.0</td>
<td>131</td>
</tr>
<tr>
<td>Totals</td>
<td>88</td>
<td>100.0</td>
<td>202</td>
</tr>
</tbody>
</table>

of administrators reported that they were single, divorced, or separated (33.0%) than did the teachers (23.3%).

Table 7 provides a summary of the responses. The responses of subjects who indicated that they were divorced, separated, or single were grouped as were the responses of those who indicated that they were widowed or married. Responses were grouped in this fashion since it seemed that women who had chosen and stayed with their marriages (a more traditional female role) had more in common than those who had never married or who had taken steps to end their marriages.

Dependent children in the home. The majority, 67% of administrators reported that no dependent children lived with them. This figure can be compared to approximately 50% of the teachers reporting no dependent children. See Table 8.
### Table 6

<table>
<thead>
<tr>
<th>Age</th>
<th>Administrators</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>20 to 24</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>25 to 29</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>30 to 34</td>
<td>6</td>
<td>6.8</td>
</tr>
<tr>
<td>35 to 39</td>
<td>13</td>
<td>14.8</td>
</tr>
<tr>
<td>40 to 44</td>
<td>15</td>
<td>17.0</td>
</tr>
<tr>
<td>45 to 49</td>
<td>18</td>
<td>20.5</td>
</tr>
<tr>
<td>50 to 54</td>
<td>13</td>
<td>14.8</td>
</tr>
<tr>
<td>55 to 59</td>
<td>15</td>
<td>17.0</td>
</tr>
<tr>
<td>60 or more</td>
<td>8</td>
<td>9.1</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. Missing data = 2.

**Summary of personal information.** Profiles describing an administrator and a teacher may be of value in creating an image of the typical respondents. The information utilized in preparing the profile that follows represents the most commonly occurring or mid-range respondents, rather than extremes, as taken from Tables 4 through 8.

The typical administrator was an elementary school principal who had held her post for fewer than 10 years. In her mid to late 40's,
Table 7
Marital Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Administrators</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>Single</td>
<td>18</td>
<td>20.5</td>
</tr>
<tr>
<td>Divorced</td>
<td>11</td>
<td>12.5</td>
</tr>
<tr>
<td>Separated</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Subtotal</td>
<td>29</td>
<td>33.0</td>
</tr>
<tr>
<td>Widowed</td>
<td>6</td>
<td>6.8</td>
</tr>
<tr>
<td>Married</td>
<td>53</td>
<td>60.2</td>
</tr>
<tr>
<td>Subtotal</td>
<td>59</td>
<td>67.0</td>
</tr>
<tr>
<td>Totals</td>
<td>88</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 8
Dependent Children in the Home

<table>
<thead>
<tr>
<th>Number of children in home</th>
<th>Administrators</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>0</td>
<td>59</td>
<td>67.0</td>
</tr>
<tr>
<td>1</td>
<td>9</td>
<td>10.3</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>17.0</td>
</tr>
<tr>
<td>3 or more</td>
<td>5</td>
<td>5.7</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. Missing data = 2.
she was most likely married with no dependent children remaining at home.

The typical teacher was responsible for an elementary school classroom and had held a teaching position for more than 10 years. In her mid to late 30's, she was very likely married and may or may not have had dependent children in her home.

Tests of the Hypotheses

The following hypotheses provide an opportunity to compare and contrast women in educational administration with nonadministrative women in education on a number of factors relating to their socialization, educational backgrounds, and career commitments. The hypotheses grew out of the review of literature that was presented in Chapter 2.

For the sake of clarity, each of the 15 hypotheses will be restated and followed by a statement of statistical significance. The probability allowed for committing a Type I error (i.e., incorrectly rejecting the null hypothesis) was .10.

Socialization

Hypothesis 1. When compared to women teachers, women in educational administration differed in regard to their mothers' employment status during the administrators' childhoods.

Table 9 indicates that no significant difference existed in the job status of their mothers between administrators and nonadministrators. The Fisher exact probability test for obtaining a table as
probable or less probable than the given table equals .46. Therefore, this hypothesis was not supported. Though a slightly greater percentage of administrators, when contrasted with the nonadministrators, had working mothers, subjects in both groups were most likely to have had mothers who remained at home during the subjects' childhood years.

Table 9
Career Status of Mothers During the Childhoods of Subjects

<table>
<thead>
<tr>
<th>Status</th>
<th>Administrators</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>Homemaker</td>
<td>57</td>
<td>68.7</td>
</tr>
<tr>
<td>Career</td>
<td>26</td>
<td>31.3</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. Missing data = 1.
*p = .46

Hypothesis 2. When compared to women teachers, women in educational administration more often have had childhood experiences similar to those typical for males.

The data analysis indicated a significant difference between administrative and nonadministrative women in the frequency of their childhood experiences that were similar to those typical for males. The t test for independent means yielded a value of t = 2.09 which lies well below the critical value. In fact, Table 10 indicates that
the exact probability of obtaining a $t$ of 2.09 or less, given a true null hypothesis, is .019. Hypothesis 2 was supported.

Table 10

Frequency of Childhood Experiences Similar to Those Typical for Males

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>$t$</th>
<th>df</th>
<th>Prob. (one tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrators</td>
<td>88</td>
<td>3.3</td>
<td>1.9</td>
<td>2.09</td>
<td>288</td>
<td>.019</td>
</tr>
<tr>
<td>Teachers</td>
<td>202</td>
<td>2.8</td>
<td>1.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition, it is of some interest to examine the specific descriptors that administrators and teachers most often chose to describe themselves as children. Table 11 is an informational table which lists eight terms and phrases that the literature suggested were more typically descriptors for males than for females. The percentage of response to the descriptors "enjoyed competition," "a leader," and "took risks" were substantially higher for the administrators than for the teachers.

Hypothesis 3. When compared to the fathers of women teachers, the fathers of women in educational administration have higher levels of education.

Table 12 indicates that no significant differences existed between the educational levels of the fathers of administrative and nonadministrative women. The Fisher exact probability test for obtaining a table as probable as the given table equals .12. As this
Table 11
Subjects' Views of Themselves as Children

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Administrators (n = 88)</th>
<th>Teachers (n = 202)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>Club member</td>
<td>36</td>
<td>41</td>
</tr>
<tr>
<td>Male friends</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Enjoyed competition</td>
<td>45</td>
<td>51</td>
</tr>
<tr>
<td>Activities with Dad</td>
<td>20</td>
<td>23</td>
</tr>
<tr>
<td>A leader</td>
<td>36</td>
<td>41</td>
</tr>
<tr>
<td>Expected to work</td>
<td>50</td>
<td>56</td>
</tr>
<tr>
<td>Risk-taker</td>
<td>25</td>
<td>28</td>
</tr>
<tr>
<td>High achievement encouraged</td>
<td>68</td>
<td>77</td>
</tr>
</tbody>
</table>

Table 12
Educational Level of Fathers

<table>
<thead>
<tr>
<th>Level</th>
<th>Administrators</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>High school or less</td>
<td>59</td>
<td>67.8</td>
</tr>
<tr>
<td>College experience</td>
<td>28</td>
<td>32.2</td>
</tr>
<tr>
<td>Totals</td>
<td>87</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. Missing data = 2.
*p = .12.
exceeds the allowed probability for committing a Type I error, this hypothesis was not supported. In fact, Table 12 indicates the inverse of Hypothesis 3: The fathers of teachers were somewhat more likely to have had some college experience than were the fathers of administrators. However, the majority of the fathers in each group had a high school education or less.

Hypothesis 4. When compared to women teachers, women in educational administration more often are the eldest among a family's children.

Data analysis using the Fisher exact probability test did not support this hypothesis. The probability of obtaining a table as probable as Table 13 equals .61. Order of birth is not apparently an important factor for either teachers or administrators. Subjects from each group were found approximately as likely to hold another family position as to be eldest or only.

Table 13

Order of Birth

<table>
<thead>
<tr>
<th>Position</th>
<th>Administrators</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>Eldest or only</td>
<td>44</td>
<td>50.0</td>
</tr>
<tr>
<td>Other position</td>
<td>44</td>
<td>50.0</td>
</tr>
<tr>
<td>Totals</td>
<td>88</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. Missing data = 1
*p = .61.
Hypothesis 5. When compared to women teachers, women in educational administration more often have only female siblings.

Table 14 indicates that no significant differences were found between administrative and nonadministrative women in respect to the sex of their siblings. The Fisher exact test of probability for obtaining a table as probable as the given table equals .67. The hypothesis could not be supported. Teachers and administrators were about equally as likely to have had both brothers and sisters as siblings.

Table 14

<table>
<thead>
<tr>
<th>Siblings</th>
<th>Group Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Administrators</td>
</tr>
<tr>
<td></td>
<td>Freq.</td>
</tr>
<tr>
<td>Girls only</td>
<td>26</td>
</tr>
<tr>
<td>Boys and girls</td>
<td>61</td>
</tr>
<tr>
<td>Totals</td>
<td>87</td>
</tr>
</tbody>
</table>

Note. Missing data = 5.
*p = .67.

Hypothesis 6. When compared to women teachers, women in educational administration are more likely to have been reared in small families.

Data analysis indicated that no significant differences between teachers and administrators were found in respect to family size.
The Fisher exact probability test for obtaining a table as probable as Table 15 equals .99. This hypothesis was not supported. Teachers and administrators in the study had approximately equal likelihood (40.0%) of having been reared in small families.

Table 15
Family Size as a Child

<table>
<thead>
<tr>
<th>Number of children</th>
<th>Administrators</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>1 or 2</td>
<td>35</td>
<td>40.2</td>
</tr>
<tr>
<td>3 or more</td>
<td>52</td>
<td>59.8</td>
</tr>
<tr>
<td>Totals</td>
<td>87</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. Missing data = 1.

*P = .99

Hypothesis 7. When compared to the age at which women teachers decided to make careers in education their goals, women in educational administration make their decisions to seek careers in administration at a later age.

The data analysis indicated a significant difference between women teachers and women administrators in regard to the age at which career goals were determined. The Fisher exact probability test for obtaining a table as probable as Table 16 equals .00. This probability is well within the allowed probability for making a Type I error, .10. Hypothesis 7 was supported.
The data in Table 16 indicate that only 13.5% of the administrative subjects had decided to seek administrative positions in education prior to college graduation. Most teachers, 91.8%, had made their career decisions before or during their college years.

Table 16

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Group Frequencies</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Administrators</td>
<td>Teachers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Freq.  Percent</td>
<td>Freq.  Percent</td>
<td></td>
</tr>
<tr>
<td>Before or</td>
<td>10 13.5</td>
<td>178 91.8</td>
<td></td>
</tr>
<tr>
<td>during college</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After college</td>
<td>64 86.5</td>
<td>16 8.2</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>74 100.0</td>
<td>194 100.0</td>
<td></td>
</tr>
</tbody>
</table>

Note. Missing data = 11.

*p = .00.

Hypothesis 8. When compared to women teachers, women in educational administration have records of higher achievement in elementary and secondary schools.

As is illustrated by the data in Table 17, a significant difference between administrators and nonadministrators, in relation to achievement, was demonstrated. The Fisher exact probability test for obtaining a table as probable as the given table equals .02. Administrators reported receiving significantly more A's or mostly A's than did teachers. Hypothesis 8 was supported.
Table 17
Achievement in Elementary and Secondary Schools

<table>
<thead>
<tr>
<th>Achievement</th>
<th>Group Frequencies</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Administrators</td>
<td>Teachers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
<td>Freq.</td>
</tr>
<tr>
<td>A's or mostly A's</td>
<td>61</td>
<td>70.1</td>
<td>110</td>
</tr>
<tr>
<td>Mostly B's or C's</td>
<td>26</td>
<td>29.9</td>
<td>91</td>
</tr>
<tr>
<td>Totals</td>
<td>87</td>
<td>100.0</td>
<td>201</td>
</tr>
</tbody>
</table>

Note. Missing data = 1.

*p = .02.

Educational Background

Hypothesis 9. When compared to women teachers, women in educational administration more often have attended large, public colleges or universities.

Table 18 illustrates that no significant differences were found between administrators and teachers in regard to the type of college or university attended. The Fisher exact probability test for obtaining a table as probable as the given table equals .34. Therefore, Hypothesis 9 was not supported. Both teachers and administrators reported attending colleges or universities not described as large and public.
Table 18
Type of College or University Attended

<table>
<thead>
<tr>
<th>Type</th>
<th>Administrators</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>Large, public</td>
<td></td>
<td></td>
</tr>
<tr>
<td>institutions</td>
<td>25</td>
<td>28.7</td>
</tr>
<tr>
<td>Other institutions</td>
<td>62</td>
<td>71.3</td>
</tr>
<tr>
<td>Totals</td>
<td>87</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. Missing data = 2.

*p = .34.

Hypothesis 10. When compared to women teachers, women in educational administration more often had undergraduate majors in traditionally "male subjects," such as business, math, or science.

The data analysis indicated no significant differences between women teachers and women administrators in regard to their major fields of study as undergraduates. The Fisher exact probability test for obtaining a table as probable as Table 19 equals .62. Therefore, Hypothesis 10 was not supported. Neither the teachers nor the administrators were likely to have majored in a traditional male field.

Hypothesis 11. When compared to women teachers, women in educational administration differed in regard to level of academic degrees attained.
Table 19
Type of Undergraduate Major

<table>
<thead>
<tr>
<th>Major</th>
<th>Administrators</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>Business, math, or science</td>
<td>15</td>
<td>20.0</td>
</tr>
<tr>
<td>Arts, humanities, languages, etc.</td>
<td>60</td>
<td>80.0</td>
</tr>
<tr>
<td>Totals</td>
<td>75</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. Missing data = 5.

*p = .62.

The data analysis indicated a significant difference between women teachers and women administrators in regard to degrees held. As is illustrated in Table 20, only 5.8% of the administrators reported holding only a B.A. or B.S., which was the highest degree attained by 50.0% of the teachers. The chi-square test of independence yielded a value of 73.74. The exact probability of obtaining a chi-square of 73.74 when the null hypothesis is true is .00. Therefore, support was found for Hypothesis 11.

Career Commitment

Hypothesis 12. When compared to women teachers, women in educational administration invest a greater number of after-work hours in career-related activities.
Table 20
Highest Degree Held

<table>
<thead>
<tr>
<th>Degree</th>
<th>Administrators</th>
<th></th>
<th>Teachers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>B.A. or B.S.</td>
<td>5</td>
<td>5.8</td>
<td>101</td>
<td>50.0</td>
</tr>
<tr>
<td>M.A.</td>
<td>43</td>
<td>49.4</td>
<td>76</td>
<td>37.6</td>
</tr>
<tr>
<td>M.A. + 30 or specialist</td>
<td>20</td>
<td>23.0</td>
<td>22</td>
<td>10.9</td>
</tr>
<tr>
<td>M.A. + 60 or doctorate</td>
<td>19</td>
<td>21.8</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>Totals</td>
<td>87</td>
<td>100.0</td>
<td>202</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. $\chi^2 = 73.74; \ df = 3.$

* $p = .00$

The data analysis indicated a significant difference between teachers and administrators in relation to the number of additional hours invested in career-related activities. The Fisher exact probability test for obtaining a table as probable as Table 21 equals .00. Women administrators were found to be likely to spend a greater number of hours on career-related activities than were teachers. Thus, Hypothesis 12 was supported.

Hypothesis 13. When compared to women teachers, women in educational administration are more involved in career-related activities.
<table>
<thead>
<tr>
<th>Hours per week</th>
<th>Administrators</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>1 hour or less</td>
<td>11</td>
<td>13.3</td>
</tr>
<tr>
<td>2 to 6 hours</td>
<td>72</td>
<td>86.7</td>
</tr>
<tr>
<td>Totals</td>
<td>83</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note. Missing data = 6

*p = .00.

As can be seen in Table 22, the mean for the number of activities in which administrators reported being involved was 2.7, while the mean for teachers was 2.0. The *t* test for independent means yielded a value of *t* = 3.69 which lies well below the critical value for rejecting the null hypothesis. In fact, the probability of obtaining a *t* of 3.69 or less, given a true null hypothesis, is .00. Hypothesis 13 was supported.

In addition, it is of some interest to look at the specific types of career-related activities with which the subjects were involved. Administrators reported substantially greater involvement than teachers in committee responsibilities, research, program development, consultant services, and professional organizations. Table 23 provides a summary of this information.
### Table 22

**Degree of Involvement in Career-Related Activities**

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>Prob. (one tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrators</td>
<td>88</td>
<td>2.7</td>
<td>1.45</td>
<td>3.69</td>
<td>288</td>
<td>.00</td>
</tr>
<tr>
<td>Teachers</td>
<td>202</td>
<td>2.0</td>
<td>1.51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 23

**Nature of Involvement in Career-Related Activities**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Administrators</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>Committees</td>
<td>75</td>
<td>87.2</td>
</tr>
<tr>
<td>Research</td>
<td>12</td>
<td>14.0</td>
</tr>
<tr>
<td>Program development</td>
<td>42</td>
<td>48.8</td>
</tr>
<tr>
<td>Course work</td>
<td>38</td>
<td>44.2</td>
</tr>
<tr>
<td>Consultant services</td>
<td>16</td>
<td>18.6</td>
</tr>
<tr>
<td>Professional groups</td>
<td>54</td>
<td>62.8</td>
</tr>
</tbody>
</table>

**Note.** Missing data = 2.
Hypothesis 14. When compared to women teachers, women in educational administration are more likely to have set specific goals for career advancement.

Table 24 indicates that a significant difference existed between teachers and administrators in regard to setting goals for seeking a job with greater responsibility. The Fisher exact probability test for obtaining a table as probable as the given table equals .01. Administrators reported setting specific goals for career advancement more frequently than did teachers. Hypothesis 14 was supported.

Table 24
Goals for Career Advancement

<table>
<thead>
<tr>
<th>Desired job</th>
<th>Group Frequencies</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Administrators</td>
<td>Teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Freq.  Percent</td>
<td>Freq.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same or undecided</td>
<td>38  52.8</td>
<td>122 70.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More responsibility</td>
<td>34  47.2</td>
<td>50  29.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>72  100.0</td>
<td>172 100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Missing data = 3.
*p = .01.

Hypothesis 15. When compared to women teachers, women in educational administration are more likely to be taking specific steps toward their career goals.
As is illustrated in Table 25, the mean for the reported number of positive actions toward career goals was 1.58 for the administrators, but only .99 for the teachers. The $t$ test for independent means yielded a value of $t = 3.53$, which lies below the critical value for rejecting the null hypothesis. In fact, the probability of obtaining a $t$ of 3.53 or less, given a true null hypothesis is .00. Hypothesis 15 was supported.

Table 25

Positive Actions Taken Toward Career Goals

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>$t$</th>
<th>df (one tailed)</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrators</td>
<td>88</td>
<td>1.58</td>
<td>1.76</td>
<td>3.53</td>
<td>288</td>
<td>.00</td>
</tr>
<tr>
<td>Teachers</td>
<td>202</td>
<td>.99</td>
<td>1.05</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The specific type of actions that administrators and teachers reported taking to achieve their goals are presented in Table 26. Administrators more often were found to be: (a) investing additional hours in the job, (b) taking graduate courses toward advanced degrees, (c) learning more about the job, (d) learning more about the organization and its people, and (e) increasing their involvement in committee work and/or special projects.

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Table 26
Frequency of Types of Actions Taken Toward Career Goals

<table>
<thead>
<tr>
<th>Activity</th>
<th>Administrators (n = 86)</th>
<th>Teachers (n = 202)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freq.</td>
<td>Percent</td>
</tr>
<tr>
<td>None</td>
<td>23</td>
<td>26.7</td>
</tr>
<tr>
<td>Additional hours</td>
<td>24</td>
<td>27.9</td>
</tr>
<tr>
<td>Technical skills</td>
<td>22</td>
<td>25.6</td>
</tr>
<tr>
<td>Graduate courses</td>
<td>28</td>
<td>32.6</td>
</tr>
<tr>
<td>Learning about job</td>
<td>21</td>
<td>24.4</td>
</tr>
<tr>
<td>Increased involvement</td>
<td>14</td>
<td>16.3</td>
</tr>
<tr>
<td>Seeking advice</td>
<td>4</td>
<td>4.7</td>
</tr>
<tr>
<td>Learning about organization</td>
<td>26</td>
<td>30.2</td>
</tr>
<tr>
<td>and people</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Missing data = 2.

Summary of the Findings

The purpose of this chapter was to describe the subjects participating in this study and to report the results of the testing of the hypotheses. It presented the data which supported or did not support the hypotheses first stated in Chapter II. Those hypotheses were designed to reveal differences between women in educational administration and women teachers in regard to the socialization process, educational backgrounds, and career commitments.
Results of data analyses indicated differences to exist between women administrators and women teachers regarding eight of the hypotheses. It was found that, when compared to women teachers, women administrators more often: (a) reported childhood experiences similar to those typical for males, (b) made their career decisions at a later age, (c) were higher achievers in elementary and secondary schools, (d) held higher degrees, (e) were involved in more career-related activities, (f) spent more hours on these activities, (g) had formulated specific career goals, and (h) were taking steps toward achieving those goals.

Chapter V includes a review and summary of the study. A discussion of conclusions that may be drawn from the results of the data analyses presented in this chapter and recommendations for future studies are presented as well.
CHAPTER V

SUMMARY AND CONCLUSIONS

The intent of this study was to identify the qualities and environments that were conducive to success for women in attaining educational leader positions. To do so, information was gathered concerning the socialization process, the educational backgrounds, and the career commitments of women administrators and was compared to similar information gathered from women teachers.

Chapter V begins with a summary of the study and its results. In addition, conclusions relative to the socialization process, the educational backgrounds, and the career commitments of women administrators are discussed, with full consideration to the results of the data analyses as presented in Chapter IV and in relation to the literature. Recommendations for future research are also offered.

Summary of the Study

The purpose of this study was to compare the socialization process, the educational backgrounds, and the career commitments of women in educational leader positions with women in education who had not attained leader positions. The study explored the possibility that differences exist in those areas that, in total, have set some women apart and have resulted in their pursuit and attainment of administrative positions.
Following a review of related literature, 15 research hypotheses were constructed to investigate the possible relationship between a woman's attainment of an administrative position and the following variables: (a) career status of her mother during her childhood, (b) childhood experiences resembling the pattern for males, (c) educational level of her father, (d) order of birth, (e) sex of siblings, (f) family size, (g) age of career decision, (h) achievement in elementary and secondary schools, (i) type of college attended, (j) undergraduate major, (k) highest degree held, (l) hours invested on career-related activities, (m) involvement in a variety of career-related activities, (n) goals for career advancement, and (o) action toward attaining those goals.

Subjects for each of two sample groups were randomly selected from the population of professional women educators in Michigan. Members of the administrators' group (n = 100) were women who held administrative positions in public school districts at the time of the study. Members of the teachers' group (n = 303) were women who were employed in nonadministrative positions and who held current certification at the time of the study.

Each person was asked to complete a questionnaire developed by the researcher. The questionnaires were comprised of questions designed to provide background information about the subjects and to investigate their early socialization, educational backgrounds, and career commitments. The questions were designed so they could be answered by choosing from a list of alternative responses.
Questionnaires were mailed to each group of subjects, and were followed in 2 weeks with a postcard reminder to those subjects who had not yet responded. Total response allowed the researcher to statistically analyze data for 88 administrators and 202 teachers, representing an overall return rate of 74%.

Results of data analyses found significant differences to exist between women administrators and women teachers for eight of the hypotheses. It was found that, when compared to women teachers, women administrators: (a) more often had childhood experiences resembling the pattern for males, (b) made their career decisions at a later age, (c) were higher achievers in elementary and secondary schools, (d) held higher degrees, (e) were involved in more career-related activities (f) on which they spent more hours, and (g) had formulated specific career goals and (h) were taking steps toward achieving those goals.

Conclusions About the Respondents

It is of some interest to briefly review information related to the rate of return of the questionnaires and to comment on portions of the reported personal information describing the subjects.

With the exception of the city of Detroit, administrators completed and returned questionnaires at a far greater rate than did teachers. A possible explanation for this greater return rate is that administrators are faced daily with a variety of tasks that must be completed. They have possibly established routines that facilitate the completion of paperwork (such as filling out the
questionnaire). A second possible explanation is that administrators were simply more interested in the focus of the questionnaire and its possible results. Yet another possibility is that, since most of the administrative subjects had graduate degrees, they may have been sympathetic to the researcher's need to complete this study. Because of the higher return rate for administrators, information reported in this study is likely to be accurate to a greater degree for administrators than for teachers.

Personal data indicated that, when compared to the teachers, the administrators tended to be older and, perhaps as a result, less likely to have dependent children at home. The majority of administrators were married, but as a group they were somewhat more likely to be leading a single life (i.e., single, divorced, separated, or widowed) than were the teachers. This apparent difference may also be related to the ages of the subjects.

The personal data presented in Chapter IV should provide reliable information about women teachers and administrators in Michigan public schools that may be valuable to future study of these groups. Once again, those data are most representative of teachers from rural to mid-size communities in outstate Michigan and representative to a lesser degree of teachers from Detroit and other large, metropolitan areas. Information reported about women administrators is representative of women from all areas in Michigan with the exception of the city of Detroit. Generalizations drawn from this study should be interpreted with the limitation that the respondents were not representative of the sample; therefore, the sample is not representative.
Conclusions Regarding the Hypotheses

The following conclusions are directly related to the results of the hypotheses testing that was discussed in Chapter IV. Conclusions are grouped here according to socialization, educational background, and career commitment. Conclusions are based upon the significance of the statistical evidence. Comments and possible explanations for some of the outcomes will be offered.

The Socialization Process

Hypotheses 1-8, concerning the socialization process, were designed to explore the events and circumstances, planned and unplanned, which may have resulted in particular behaviors and actions of interest to this study.

Career status of mother. Hypothesis 1 was: When compared to women teachers, women in educational administration differed in regard to their mothers' employment status during the administrators' childhoods. Most of the literature concerning job status of mothers indicated that the presence of an achieving maternal model (i.e., a mother with a full-time job) was more frequent for women in leader positions than for other women. There are several possible reasons that would explain the lack of support for this hypothesis found in this study.
Women administrators and the group of teachers from which they emerge are in "nurturing" roles, relating most often to other women, children, and young people. They are thus more closely allied to traditional feminine roles than are women in business or industry. Furthermore, the majority of the women administrators responding in this study were at entry level (i.e., principals) and as such, a lesser degree of differentiation would be likely for them than was apparent for the top-level women in business administration discussed most often in the literature reviewed.

Childhood experiences similar to those typical for males. Support was found for Research Hypothesis 2: When compared to women teachers, women in educational administration more often have childhood experiences similar to those typical for males. Specifically, it can be concluded that exposure to and involvement in competitive situations, the early assumption of leader roles, and willingness to take social and academic risks were childhood experiences that were had substantially more often by administrators than by teachers.

No single experience, however, was shared by all the administrators or seemed to dramatically differentiate them from the teachers. Of the three experiences which most differentiated administrators and teachers, the one shared most often by the administrators was "enjoyed competition," and this experience was common to only about half of the administrative subjects.

The experiences to which administrators most frequently responded positively, "expected to work" and "family encouraged
achievement," were experiences shared by the majority of teachers as well.

Educational level of fathers. Research Hypothesis 3 was: When compared to the fathers of women teachers, the fathers of women in educational administration have higher levels of education. The literature suggested that administrative women more often had fathers who were employed in professions and who were thus, by implication, more highly educated than were the fathers of nonadministrative women. Hypothesis 3 was not supported in this study. In fact, data revealed that the fathers of teachers were more likely to have had some college experience than were the fathers of administrators. There was no evidence to support that the fathers' educational level was a factor predicting attainment of leader positions for these women.

A factor which may have affected the outcome of this hypothesis was the age of the subjects. Data revealed that the administrative women, as a group, were older than the group of teachers. The possibility of acquiring a college education seems to have become more likely as time has passed during this century. Higher education enjoyed tremendous growth in the years immediately following World War II. As a group, the parents of teachers can be assumed to be younger than the parents of administrators. Thus, many of the fathers of teachers were young adults after the war, while the fathers of administrators were young adults during prewar years. These younger fathers of teachers may have had more opportunity to make college a reality.
Order of birth, female siblings, and small families. Three hypotheses are related to this typic. Hypothesis 4 was: When compared to women teachers, women in educational administration more often are the eldest among a family's children. Hypothesis 5 was: When compared to women teachers, women in educational administration more often have only female siblings. Hypothesis 6 was: When compared to women teachers, women in educational administration are more likely to have been reared in small families. These hypotheses were based on several studies which indicated that administrative women significantly more often held the position of eldest child among female siblings, and were reared in a small family. Surprisingly, none of these hypotheses was supported by the data collected in this study. In fact, administrators were very nearly representative of the group of teachers from which they had emerged. For this study, no support was found to indicate that "accidents of birth," factors over which the subjects had no control, made a difference in the attainment of leader positions.

Several factors may have affected the outcome of these studies. Those women discussed in the studies in the review of literature were not public school administrators, but women who administered in business and higher education. As stated previously, the women subjects in this study were in "nurturing" roles and as such may have been less aggressive than were their business-world counterparts. We are also reminded that a lesser degree of differentiation would be likely among entry level administrators than was apparent for the top-level women in business who were discussed most in the literature reviewed.
**Age of career decision.** Hypothesis 7 was: When compared to the age at which women teachers decided to make careers in education their goals, women in educational administration make the decision to seek careers in administration at a later age. Data gathered in previous studies suggested that administrative women in both business and education had made their decisions to seek administrative careers relatively late. Hypothesis 7 was supported in this study. It can be concluded that women administrators most often did not set out to become administrators, but gradually made those decisions after completing their undergraduate degrees and obtaining teaching experience.

The personal college experience of the researcher during the 1960's was that many males who were majoring in education readily stated their intentions of becoming administrators. The researcher cannot recall a single instance when a female made a similar statement. This observation concurs with the results of the data analysis for this hypothesis.

**Achievement in elementary and secondary schools.** Hypothesis 8 was: When compared to women teachers, women in educational administration have records of higher achievement in elementary and secondary schools. The literature suggested that administrative women were motivated by feelings of achievement and had been high achievers in school. As the related hypothesis was supported in this study, it can be concluded that the administrators reported being better students than did the teachers. These women very likely had supportive parents who set high goals and encouraged a high level of achievement,
as did the parents of the high-level management women studied by Hennig (Hennig & Jardim, 1977). It can further be implied that the families of these women valued and supported education and the schools.

Educational Background

Hypotheses 9-11 related to educational background and were designed to explore academic degrees attained, undergraduate majors, and the types of colleges or universities attended.

Type of college or university attended and undergraduate major.

Two hypotheses are related to this topic. Hypothesis 9 was: When compared to women teachers, women in educational administration more often have attended large, public colleges or universities. Hypothesis 10 was: When compared to women teachers, women in educational administration more often have undergraduate majors in traditionally "male subjects," such as business, math, or science. Information gathered in previous studies indicated that women who had become administrators had, more often than nonadministrators, attended large coeducational public universities and had majored in subjects such as math, science, or business. No support was found for Hypotheses 9 and 10 by data obtained in this study.

Several possible explanations for this lack of support come to mind. Generally speaking, the women administrators in this study began their careers in education as teachers in the early to mid-sixties or before. They entered a field in which women were accepted
contributors and at a time when "any warm body" was hired, due to a widespread teacher shortage. Contrast that situation to the one faced by young women attempting to enter business or industry during the same era. Competition for good jobs was not uncommon, and those competing were expected to be males. It follows that women who were somehow hired, then obtained managerial status were most likely to have had outstanding credentials from respected universities.

Degrees held. Hypothesis 11 was: When compared to women teachers, women in educational administration differed in regard to level of academic degrees attained. The literature supported a strong educational background, including the pursuit of advanced degrees for women aspiring to management positions. Hypothesis 11 was supported by data obtained in this study. Very few administrators held no advanced degree, and in fact, one out of five held a doctorate or its equivalent.

Perhaps the explanation for the high percentage of advanced degrees held by the administrators is that many school districts require a master's or a specialist's degree for administrative positions. Assuming that is true, then it can be concluded that a candidate's willingness to pursue advanced degrees was as much a factor as their actual attainment.

Career Commitment

Hypotheses 12-15 were related to career commitment and were concerned with discovering the subject's degree of involvement in
career-related activities and in determining the existence of and actions toward career goals.

Career-related activities. Two hypotheses are related to this topic. Hypothesis 12 was: When compared to women teachers, women in educational administration invest a greater number of after-work hours in career-related activities. Hypothesis 13 was: When compared to women teachers, women in educational administration are more involved in career-related activities. The literature indicated that administrative women were likely to be involved in a variety of career-related activities that required an investment of extra hours. The related hypotheses were supported in this study. It can be concluded that the administrators responding to this study were more involved in career-related activities, and spent a greater number of hours on them, than did the teachers.

Whether this involvement can be viewed as a predictor for attainment of administrative positions is not known. But we do know that these factors are of interest to those who hire. Such involvement may be considered an administrative responsibility and may not have been present prior to the attainment of the positions.

Career advancement. Two hypotheses are related to this topic. Hypothesis 14 was: When compared to women teachers, women in educational administration are more likely to have set specific goals for career advancement. Hypothesis 15 was: When compared to women teachers, women in educational administration are more likely to be taking specific steps toward their career goals. The literature
noted the importance of formulating specific goals related to career advancement and of taking action toward those goals. The results of data analysis supported the related hypotheses in this study. It can be concluded that these women administrators more often had formulated goals for attaining jobs with greater responsibility, and more often were taking action toward those goals, than were the women teachers.

Summary of the Conclusions

A total of 15 hypotheses was proposed and had been designed to reveal differences between women in educational administration and women teachers in regard to the socialization process, educational backgrounds, and career commitments.

Of the eight hypotheses related to socialization, only three were supported. It was concluded that the experiences of the women administrators in this study more closely resembled the socialization pattern for males than did the experiences of women teachers. Neither women administrators nor teachers, however, could be described as having experiences highly similar to those of young males. It was also concluded that decisions to seek administrative careers were gradually formulated after completing college and obtaining teaching experience. The women administrators were also found to have reported being higher achievers in elementary and secondary schools than did the women teachers.

No difference between teachers and administrators was found in relation to the job status of their mothers during their childhoods,
the educational levels of their fathers, birth order, sex of siblings, or family size.

Only one of the three hypotheses related to educational background was supported. It was concluded that women administrators held more advanced degrees than did women teachers. There was no support found for differences in the types of colleges or universities attended or the types of undergraduate majors.

Each of the four hypotheses related to career commitment was supported. It was concluded that administrators reportedly: (a) spent more time on career activities, (b) engaged in a greater number of activities, (c) more often had formulated specific goals for career advancement, and (d) were taking steps toward achieving their goals.

It would appear, then, that the factors beyond the control of the subjects (i.e., birth order, size of family, job status of mother, etc.) were predominant among those for which no support was found.

There are several possible reasons for the discrepancies between the findings reported in this study and those discovered in the review of literature. They are: (a) in contrast to business, women have traditionally been accepted in the field of education; (b) the roles of teacher/school administrator can be described as "nurturing," and are thus little removed from traditional female domains; and (c) a lesser degree of competition for jobs existed among women entering education than among those who entered business or industry.
Implications

Some implications for women who aspire to positions in educational administration can be drawn from the results of this study. The die was not cast for these women by factors beyond their control. No support was found in this study that would indicate that birth order, number and sex of siblings, educational level of the father, or the job status of the mother were predictors of the attainment of leader positions.

Rather, the majority of the hypotheses for which support was found were those over which the subjects had control. In this study, there were specific factors which differentiated women administrators from women teachers. This group of women pursued and attained higher degrees. They were involved in a number of career-related activities and were willing to spend a considerable amount of time on them. Finally, these women had formed specific career goals, and they were actively working toward achieving them.

Thus, a woman seeking an administrative position in education should realize she has some power over her own destiny. She would be advised to follow the pattern established by the women administrators in this study. The more one looks like an administrator, the more likely one is to be considered for such a post.

Recommendations

It is hoped that the results of this research will provide useful information on which to base further studies of women
administrators in education. Having concluded this study, several questions of interest remain unanswered for this researcher. They include: (a) How much did the job held influence the subject's job-related behavior? (b) Are the changing expectations of our society for women producing a different sort of woman administrator at the entry level now as contrasted to a decade or more ago? (c) If separated from the larger group, would high-level women administrators in education more closely resemble the women from business and industry discussed in the literature reviewed for this study? (d) What characteristics, if any, are descriptive of a woman at the conclusion of her university training that would predict her eventual pursuit and/or attainment of an administrative post?

If future research is conducted in this area, it is recommended that several different types of studies be given consideration. First, a study using a stratified sample of administrative women in education would make it possible to differentiate this group of women by such factors as type of position, years of administrative service, age, personal background, and so on. Such a study might reveal patterns of change or development.

A second area of research to be considered is one that would focus on only the top-level women in educational administration—those holding positions of superintendent or assistant superintendent in public school districts. To obtain adequate numbers for this type of study, it is likely that the entire nationwide population of these high-level women would be necessary. Consideration should be given to the best method for obtaining responses from these busy people.
Finally, consideration should be given to a longitudinal study of women graduates in the field of education. Such persons, selected from a single class graduating from a large university, might provide the group of subjects. An in-depth personality profile and pertinent background information could be obtained. As an incentive for participation, an analysis of the profile might be made available to each subject. In the years following graduation, questionnaires might be sent periodically to each subject so as to follow her career in education. At the conclusion of the study, a pattern of predictors might become apparent for those who had (and had not) attained leader positions in education.
Dear

The attached questionnaire is being sent to you in your capacity as a Utica Community Schools educator. Your responses, together with those from other women educators in Utica, will be used as a pilot for a graduate school study of characteristics common to women in education. I believe that the results of this study will help women educators to better understand themselves and thus to better control their career futures.

The purpose of this pilot study is to discover any potential difficulties with the questionnaire or data collection. Your responses and comments will help me to make the necessary changes prior to the actual study.

Please take the few minutes necessary to complete the questionnaire and return it to me via inter-school mail to the Board Office. Your help and cooperation is greatly appreciated.

Sincerely,

Elaine Morris
Appendix B

Pilot Teacher Questionnaire
TEACHER QUESTIONNAIRE

THE NUMBER IN THE UPPER RIGHT HAND CORNER IS FOR FOLLOW-UP IDENTIFICATION PURPOSES ONLY. AS QUESTIONNAIRES ARE RETURNED, NUMBERS WILL BE CHECKED OFF AND NAMES AND IDENTIFYING NUMBERS WILL BE DESTROYED. YOUR RESPONSES TO THIS QUESTIONNAIRE WILL BE MAINTAINED IN THE STRICTEST CONFIDENCE.

1. Which of the following describes your current employment position?
   [1] classroom teacher, elementary or middle school
   [2] classroom teacher, junior high or high school
   [3] other __________________________

2. For how many years have you held a teaching position?
   [1] less than 2 years
   [2] 2 to 5 years
   [3] 5 to 10 years
   [4] 10 to 15 years
   [5] 15 to 20 years
   [6] more than 20 years

3. What is your age?
   [1] 20-24
   [3] 30-34
   [5] 40-44
   [6] 45-49
   [7] 50-54
   [8] 55-59
   [9] 60 or over

4. What is your marital status?
   [1] single
   [2] divorced
   [3] widowed
   [4] married
   [5] separated

5. How many dependent children reside with you?
   [1] none
   [2] one
   [3] two
   [4] three or more

6. At what age did you decide to make a career in education your goal?
   [1] childhood
   [2] adolescence
   [3] college years
   [4] after college
   [5] a career in education
   [6] is not my goal

7. What is your highest degree?
   [1] B.A. or B.S.
   [3] M.A. + 30 or Specialist's Degree
   [4] M.A. + 60 or Doctorate

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8. What was your undergraduate major?


9. What was the nature of your undergraduate college?

[2] private, coeducational

10. Which best describes the size of the student body in your undergraduate college?

[1] under 2,000 [2] 6,000 to 12,000
[2] 2,000 to 5,999 [4] over 12,000

11. Since completing your undergraduate program, which situation best describes your work record?

[1] continuous employment, first in another field, then in education
[3] resignation, or extended leave of absence for child or family responsibilities
[4] resignation, leave of absence, or sabbatical to obtain an advanced degree
[5] other ________________________________

12. In addition to your on-the-job responsibilities as an educator, which of the following describe job-related activities for which you have voluntarily invested time and effort on a regular basis?


13. On the average, how many hours a week do you devote to the above type of activity?

[1] 1 hour or less [4] more than 6 hours
[2] 2 to 3 hours [5] not applicable
[3] 4 to 6 hours
14. What kind of job would you like to have in five years?

[3] central office staff

15. What steps are you taking toward that career goal?

[1] not applicable
[2] investing additional hours on the job
[3] improving technical skills
[4] taking graduate courses toward an advanced degree
[5] learning more about the job
[6] learning more about the organization and its people
[7] increased involvement in committee work and/or special projects
[8] seeking the advice and help of a more experienced organization member
[9] other ________________________________

16. When you were growing up, which of the following best described your mother?

[1] she was a homemaker
[2] she had a career or job
[3] other ________________

17. Which of the following describes your father's educational level?

[1] did not complete high school
[2] high school diploma
[3] some college
[4] college degree
[5] postgraduate degree

18. How many children were in your family?

[1] one  [3] three or four

20. How much older than you is your next oldest sibling?

[1] I am eldest or an only child
[2] less than 3 years
[3] 3 to 5 years
[4] more than 5 years
21. In elementary and secondary schools, what was your achievement?

[3] mostly B's

22. Which of the following terms and phrases could have been used to describe you as a child?

[1] club and organization member
[2] preferred male friends
[3] enjoyed competition
[4] participated in many team sports
[5] participated in many activities with my father
[6] a leader
[7] always expected to work someday
[8] took risks socially and/or academically
[9] had supportive parents
[10] none of the above

23. Which of the following terms and phrases could be used to describe you now?

[1] club and organization member
[2] prefer male friends
[3] enjoy competition
[4] always expect to work
[5] take risks on the job
[6] take risks socially
[7] have a supportive family
[8] none of the above
Appendix C

Pilot Administrator Questionnaire
ADMINISTRATOR QUESTIONNAIRE

THE NUMBER IN THE UPPER RIGHT HAND CORNER IS FOR FOLLOW-UP IDENTIFICATION PURPOSES ONLY. AS QUESTIONNAIRES ARE RETURNED, NUMBERS WILL BE CHECKED OFF AND NAMES AND IDENTIFYING NUMBERS WILL BE DESTROYED. YOUR RESPONSES TO THIS QUESTIONNAIRE WILL BE MAINTAINED IN THE STRICTEST CONFIDENCE.

1. Which of the following describes your current employment position?
   [1] principal, elementary or middle school
   [2] principal, junior high or high school
   [3] central office staff (supervisor, director, etc.)
   [4] assistant superintendent
   [5] superintendent
   [6] other

2. For how many years have you held administrative positions?
   [1] less than two years
   [2] 2 to 5 years
   [3] 5 to 10 years
   [4] more than 10 years

3. What is your age?
   [1] 20-24
   [3] 30-34
   [5] 40-44
   [6] 45-49
   [7] 50-54
   [8] 55-59
   [9] 60 or over

4. What is your marital status?
   [1] single
   [2] divorced
   [3] widowed
   [4] married
   [5] separated

5. How many dependent children reside with you?
   [1] none
   [2] one
   [3] two
   [4] three or more

6. At what age did you decide to make a career in education your goal?
   [1] childhood
   [2] adolescence
   [3] college years
   [4] after college
   [5] a career in education is not my goal
7. What is your highest degree?


8. What was your undergraduate major?


9. What was the nature of your undergraduate college?


10. Which best describes the size of the student body in your undergraduate college?

[1] under 2,000   [3] 6,000 to 12,000
[2] 2,000 to 5,999   [4] over 12,000

11. Since completing your undergraduate program, which situation best describes your work record?

[1] continuous employment, first in another field, then in education
[3] resignation or extended leave of absence for child or family responsibilities
[4] resignation, leave of absence, or sabbatical to obtain an advanced degree
[5] other _____________________________

12. In addition to your on-the-job responsibilities as an educator, which of the following describe job-related activities for which you have voluntarily invested time and effort on a regular basis?


13. On the average, how many hours a week do you devote to the above type of activity?

[1] 1 hour or less   [4] more than 6 hours
[2] 2 to 3 hours   [5] not applicable
[3] 4 to 6 hours
14. What kind of job would you like to have in five years?

[4] assistant superintendent

15. What steps are you taking toward that career goal?

[1] not applicable
[2] investing additional hours on the job
[3] improving technical skills
[4] taking graduate courses toward an advanced degree
[5] learning more about the job
[6] learning more about the organization and its people
[7] increased involvement in committee work and/or special projects
[8] seeking the advice and help of a more experienced organization member
[9] other ___________________________________________________________________

16. When you were growing up, which of the following best described your mother?

[1] she was a homemaker
[2] she had a career or job
[3] other ___________________________________________________________________

17. Which of the following describes your father's educational level?

[3] some college

18. How many children were in your family?

[1] one  [3] three or four

19. Which category describes the children in your family?

[1] all girls
[2] girls and boys
20. How much older than you is your next oldest sibling?

[1] I am eldest or an only child  [3] 3 to 5 years
[2] less than 3 years  [4] more than 5 years

21. In elementary and secondary schools, what was your achievement?

[3] mostly B's

22. Which of the following terms and phrases could have been used to describe you as a child?

[1] club and organization member
[2] preferred male friends
[3] enjoyed competition
[4] participated in many team sports
[5] participated in many activities with my father
[6] a leader
[7] always expected to work someday
[8] took risks socially and/or academically
[9] had supportive parents
[10] none of the above

23. Which of the following terms and phrases could be used to describe you now?

[1] club and organization member
[2] prefer male friends
[3] enjoy competition
[4] always expect to work
[5] take risks on the job
[6] take risks socially
[7] have a supportive family
[8] none of the above
October 31, 1979

Dear Fellow Educator:

The attached questionnaire is being sent to you in your capacity as a Michigan public school educator. Your responses, together with those from other women educators, will be used in a graduate school study of characteristics common to women in education. We believe that the results of this study will help women educators to better understand themselves and thus to better control their career futures.

Should you be interested in a summary of the findings of this research, please include a self-addressed, stamped envelope with your questionnaire. Results should be available by late spring, 1980.

Please take the few minutes necessary to complete the questionnaire and return it in the self-addressed envelope provided. A high rate of return will contribute to the validity of the study's results. Your cooperation is greatly appreciated.

Sincerely,

Elaine Morris

H. W. Boles, Ed. D.
Professor
Appendix E

Teacher Questionnaire
1. Which of the following describes your current employment position?
   (1) classroom teacher, elementary or middle school
   (2) classroom teacher, junior high or high school
   (3) educational specialist (art, music, etc.)
   (4) other

2. For how many years have you held a teaching position?
   (1) less than 2 years
   (2) 2 to 5 years
   (3) 5 to 10 years
   (4) 10 to 15 years
   (5) 15 to 20 years
   (6) more than 20 years

3. What is your age?
   (1) 20-24
   (2) 25-29
   (3) 30-34
   (4) 35-39
   (5) 40-44
   (6) 45-49
   (7) 50-54
   (8) 55-59
   (9) 60 or over

4. What is your marital status?
   (1) single
   (2) divorced
   (3) widowed
   (4) married
   (5) separated

5. How many dependent children reside with you?
   (1) none
   (2) one
   (3) two
   (4) three or more

6. At what age did you decide to make a career in education your goal?
   (1) childhood
   (2) adolescence
   (3) college years
   (4) after college
   (5) a career in education is not my goal

7. What is your highest degree?
   (1) B.A. or B.S.
   (2) M.A.
   (3) M.A. + 30 or Specialist's Degree
   (4) M.A. + 60 or Doctorate
8. Besides education, what was your major field of study as an undergraduate?
(1) social science   (4) math  (7) English
(2) humanities      (5) science (8) fine arts
(3) business        (6) languages (9) other

9. What was the nature of the undergraduate college from which you graduated?
(1) public          (3) private, all women
(2) private, coeducational

10. Which best describes the size of the student body in the undergraduate college from which you graduated?
(1) under 2000  (3) 6000 to 12000
(2) 2000 to 5999 (4) over 12000

11. Since completing your undergraduate program, which situation best describes your work record?
(1) continuous employment, first in another field, then in education
(2) continuous employment in education
(3) resignation or extended leave of absence for child or family responsibilities
(4) resignation, leave of absence, or sabbatical to obtain an advanced degree
(5) other

12. In addition to your on-the-job responsibilities as an educator, which of the following describe job-related activities for which you have voluntarily invested time and effort on a regular basis?
(1) committee responsibilities   (5) consultant services
(2) research                   (6) professional organizations
(3) program development        (7) none of the above
(4) course work                (8) other

13. On the average, how many hours a week do you devote to the above type of activity?
(1) 1 hour or less   (4) more than 6 hours
(2) 2 to 3 hours     (5) not applicable
(3) 4 to 6 hours

14. What kind of job would you like to have in five years?
(1) undecided
(2) same job
(3) a job with greater responsibility in education
(4) a job with greater responsibility outside education
(5) other
15. What steps are you taking toward that career goal?

(1) none  
(2) investing additional hours on the job  
(3) Improving technical skills  
(4) taking graduate courses toward an advanced degree  
(5) learning more about the job  
(6) learning more about the organization and its people  
(7) increased involvement in committee work and/or special projects  
(8) seeking the advice and help of a more experienced organization member  
(9) other ___________________________________________________

16. When you were growing up, which of the following best described your mother?

(1) she was a homemaker  
(2) she had a career or job  
(3) other ___________________________________________________

17. Which of the following describes your mother's educational level?

(1) did not complete high school  
(2) high school diploma  
(3) some college or trade school  
(4) college degree  
(5) postgraduate degree

18. Which of the following describes your father's educational level?

(1) did not complete high school  
(2) high school diploma  
(3) some college or trade school  
(4) college degree  
(5) postgraduate degree

19. How many children were in your family?

(1) one  
(2) two  
(3) three or four  
(4) five or more

20. Which category describes the children in your family?

(1) all girls  
(2) boys and girls

21. How much older than you is your next oldest sibling?

(1) I am eldest or an only child  
(2) less than 3 years  
(3) 3 to 5 years  
(4) more than 5 years
22. In elementary and secondary schools; what was your achievement?
   (1) all A's
   (2) mostly A's
   (3) mostly B's
   (4) mostly C's
   (5) other _______________________

23. Which of the following terms and phrases could have been used to describe you as a child?
   (1) club and organization member
   (2) preferred male friends
   (3) enjoyed competition
   (4) participated in many activities with my father
   (5) a leader
   (6) always expected to work someday
   (7) took risks socially and/or academically
   (8) family encouraged high achievement
   (9) none of the above

24. Which of the following terms and phrases could be used to describe you now?
   (1) club and organization member
   (2) prefer male friends
   (3) enjoy competition
   (4) always expect to work
   (5) take risks on the job
   (6) take risks socially
   (7) have a family who encourages high achievement
   (8) none of the above
Appendix F

Administrator Cover Letter
Dear Fellow Administrator:

The attached questionnaire is being sent to you in your capacity as a Michigan public school administrator. Your responses, together with those from other women administrators, will be used in a graduate school study of characteristics common to women in education. We believe that the results of this study will help women educators to better understand themselves and thus to better control their career futures.

Should you be interested in a summary of the findings of this research, please include a self-addressed, stamped envelope with your questionnaire. Results should be available by late spring, 1980.

Please take the few minutes necessary to complete the questionnaire and return it in the self-addressed envelope provided. A high rate of return will contribute to the validity of the study's results. Your cooperation is greatly appreciated.

Sincerely,

Elaine Morris

H. W. Boles, Ed. D.
Professor
ADMINISTRATOR QUESTIONNAIRE

THE NUMBER IN THE UPPER RIGHT HAND CORNER IS FOR FOLLOW-UP IDENTIFICATION PURPOSES ONLY. AS QUESTIONNAIRES ARE RETURNED, NUMBERS WILL BE CHECKED OFF AND NAMES AND IDENTIFYING NUMBERS WILL BE DESTROYED. YOUR RESPONSES TO THIS QUESTIONNAIRE WILL BE MAINTAINED IN THE STRICTEST CONFIDENCE.

1. Which of the following best describes your current employment position?
   (1) principal, elementary or middle school
   (2) principal, junior high or high school
   (3) central office staff (supervisor, director, etc.)
   (4) assistant superintendent
   (5) superintendent
   (6) other

2. For how many years have you held an administrative post?
   (1) less than two years
   (2) 2 to 5 years
   (3) 5 to 10 years
   (4) more than 10 years

3. What is your age?
   (1) 20-24
   (2) 25-29
   (3) 30-34
   (4) 35-39
   (5) 40-44
   (6) 45-49
   (7) 50-54
   (8) 55-59
   (9) 60 or over

4. What is your marital status?
   (1) single
   (2) divorced
   (3) widowed
   (4) married
   (5) separated

5. How many dependent children reside with you?
   (1) none
   (2) one
   (3) two
   (4) three or more

6. At what age did you decide to make an administrative position in education your goal?
   (1) childhood
   (2) adolescence
   (3) college years
   (4) after college
   (5) an administrative position in education is not my goal

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7. What is your highest degree?
   (1) B.A. or B.S.  (3) M.A. + 30 or Specialist's Degree
   (2) M.A.        (4) M.A. + 60 or Doctorate

8. Besides education, what was your major field of study as an undergraduate?
   (1) social science  (4) math  (7) English
   (2) humanities      (5) science  (8) fine arts
   (3) business        (6) languages (9) other

9. What was the nature of the undergraduate college from which you graduated?
   (1) public
   (2) private, coeducational
   (3) private, all women

10. Which best describes the size of the student body in the undergraduate college from which you graduated?
    (1) under 2000  (3) 6000 to 12000
     (2) 2000 to 5999  (4) over 12000

11. Since completing your undergraduate program, which situation best describes your work record?
    (1) continuous employment, first in another field, then in education
    (2) continuous employment in education
    (3) resignation or extended leave of absence for child or family responsibilities
    (4) resignation, leave of absence, or sabbatical to obtain an advanced degree
    (5) other

12. In addition to your on-the-job responsibilities as an educator, which of the following describe job-related activities for which you have voluntarily invested time and effort on a regular basis?
    (1) committee responsibilities  (5) consultant service
    (2) research  (6) professional organization
    (3) program development  (7) none of the above
    (4) course work  (8) other

13. On the average, how many hours a week do you devote to the above type of activity?
    (2) 2 to 3 hours less
    (3) 4 to 6 hours
    (4) more than 6 hours
    (5) not applicable
14. What kind of job would you like to have in five years?
   (1) undecided
   (2) same job
   (3) a job with greater responsibility in education
   (4) a job with greater responsibility outside education
   (5) other ____________________________

15. What steps are you taking toward that career goal?
   (1) none
   (2) investing additional hours on the job
   (3) improving technical skills
   (4) taking graduate courses toward an advanced degree
   (5) learning more about the job
   (6) learning more about the organization and its people
   (7) increased involvement in committee work and/or special projects
   (8) seeking the advice and help of a more experienced organization member
   (9) other ________________________________

16. When you were growing up, which of the following best described your mother?
   (1) she was a homemaker
   (2) she had a career or job
   (3) other ______________________________

17. Which of the following describes your mother's educational level?
   (1) did not complete high school
   (2) high school diploma
   (3) some college or trade school
   (4) college degree
   (5) postgraduate degree

18. Which of the following describes your father's educational level?
   (1) did not complete high school
   (2) high school diploma
   (3) some college or trade school
   (4) college degree
   (5) postgraduate degree

19. How many children were in your family?
   (1) one
   (2) two
   (3) three or four
   (4) five or more

20. Which category describes the children in your family?
   (1) all girls
   (2) girls and boys
21. How much older than you is your next oldest sibling?

(1) I am eldest or an only child
(2) less than 3 years
(3) 3 to 5 years
(4) more than 5 years

22. In elementary and secondary schools, what was your achievement?

(1) all A's
(2) mostly A's
(3) mostly B's
(4) mostly C's
(5) other

23. Which of the following terms and phrases could have been used to describe you as a child?

(1) club and organization member
(2) preferred male friends
(3) enjoyed competition
(4) participated in many activities with my father
(5) a leader
(6) always expected to work someday
(7) took risks socially and/or academically
(8) family encouraged high achievement
(9) none of the above

24. Which of the following terms and phrases could be used to describe you now?

(1) club and organization member
(2) prefer male friends
(3) enjoy competition
(4) always expect to work
(5) take risks on the job
(6) take risks socially
(7) have a family who encourages high achievement
(8) none of the above
Appendix H

Follow-Up Postcard
Dear Michigan Educator,

Approximately two weeks ago, I mailed a questionnaire to you and to several hundred other women educators in Michigan. The response has been gratifying. However, each additional questionnaire that is returned will help to increase the validity of this study.

Since I have not as yet received your questionnaire, I hope you can find the few minutes necessary to fill it out and drop it in the mail. Your cooperation will be greatly appreciated.

Sincerely,

Elaine Morris


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Wells, K., & Grobman, H. G. Principals as leaders. Nation's Schools, 1955, 56(10), 75.


Wills, K., & Grobman, H. G. Principals as leaders. Nation's Schools, 1955, 56(10), 75.
