

## INFORMATION TO USERS

This was produced from a copy of a document sent to us for microfilming. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help you understand markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure you of complete continuity.
2. When an image on the film is obliterated with a round black mark it is an indication that the film inspector noticed either blurred copy because of movement during exposure, or duplicate copy. Unless we meant to delete copyrighted materials that should not have been filmed, you will find a good image of the page in the adjacent frame.
3. When a map, drawing or chart, etc., is part of the material being photographed the photographer has followed a definite method in "sectioning" the material. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.
4. For any illustrations that cannot be reproduced satisfactorily by xerography, photographic prints can be purchased at additional cost and tipped into your xerographic copy. Requests can be made to our Dissertations Customer Services Department.
5. Some pages in any document may have indistinct print. In all cases we have filmed the best available copy.

**University  
Microfilms  
International**

300 N. ZEEB ROAD, ANN ARBOR, MI 48106  
18 BEDFORD ROW, LONDON WC1R 4EJ, ENGLAND

8011211

PIGGOTT, LUCILLE CORNELIA JOHNSON

THE SOCIAL CHARACTERISTICS AND CAREER PATTERNS OF WOMEN  
ADMINISTRATORS IN NORTH CAROLINA COLLEGES AND  
UNIVERSITIES

*The University of North Carolina at Greensboro*

ED.D.

1979

University  
Microfilms  
International

300 N. Zeeb Road, Ann Arbor, MI 48106

18 Bedford Row, London WC1R 4EJ, England

THE SOCIAL CHARACTERISTICS AND CAREER PATTERNS OF WOMEN  
ADMINISTRATORS IN NORTH CAROLINA  
COLLEGES AND UNIVERSITIES

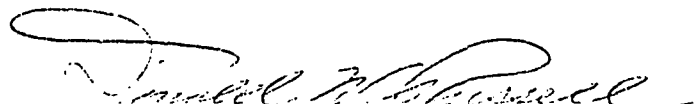
by

Lucille J. Piggott

A Dissertation Submitted to  
the Faculty of the Graduate School at  
The University of North Carolina at Greensboro  
in Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Education

Greensboro  
1979

Approved by

  
Dissertation Adviser

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

Dissertation Adviser

Donald W. Russell

Committee Members

Joseph E. Bryan

Ralph D. Dobb

J. Herman Franklin

October 9, 1979

Date of Acceptance by Committee

October 9, 1979

Date of Final Oral Examination

## ABSTRACT

PIGGOTT, LUCILLE JOHNSON. *The Social Characteristics and Career Patterns of Women Administrators in North Carolina Colleges and Universities.* (1979) Directed by: Dr. Donald W. Russell. Pp. 214.

It was the purpose of this study, conducted at the University of North Carolina at Greensboro during the Spring and Summer of 1979, to identify the major variables believed to be instrumental in influencing the positions, academic ranks and salaries of women administrators in North Carolina colleges and universities. The variables found to be influential included their (a) professional work experience backgrounds, (b) duties of the positions, (c) biographical backgrounds, (d) educational backgrounds, and (e) attitudes toward the American sex culture as they relate to prevailing stereotypic beliefs about woman's place in the society.

The subjects were three hundred forty-three women administrators employed in forty-five North Carolina four-year colleges and universities, above the hierarchical level of department chairperson.

The data were secured via a specially designed information request mailed to the subjects and from informal personal interviews. For one computation, the respondents were grouped into two position categories which placed presidents, their assistants and deans in one category and grouped directors and others in a second category. The second computation identified the respondents according to academic ranks, and the third computation categorized the respondents into two salary levels. The types of analyses utilized were frequency distributions and Chi Square.

Results emanating from the data supported the hypotheses that (1) these administrators considered themselves to be discriminated against, (2) in North Carolina higher education, there were more women in Category II

than in Category I, as designated by this study. Category I was the designation given to positions of presidents and their assistants; vice presidents and their assistants; deans, associate deans, and business managers. Category II was the designation given all positions of directors, head librarians, and others per se. (3) In considering the hypothesis that intensity of aspiration for advancement is inversely related to academic rank, it was found that the respondents in the higher positions did tend to be satisfied with their current status.

There were forty-four statistically significant relationships of the dependent variables which were position, academic rank, salary, with professional work experience background, (2) duties of the position, (3) biographical background, (4) educational background, and (5) attitudes toward the American sex culture. For example, the data showed that there is a statistically significant relationship between position of women in administration and number of years employed outside of education, decision-making responsibility, father's occupation, and present annual salary. A statistically significant relationship existed between academic rank of the respondents and age at entry to an administrative position, number of years at present institution, age range, marital status, age at which the first degree was earned, and husband's attitude toward their careers. Another interesting finding was that there is a statistically significant relationship between salary of women administrators and number of positions held, number of positions in education after acquisition of the bachelor's degree, job satisfaction source, job aspirations and number of children.

The profile of the typical woman administrator in North Carolina higher education showed that she was first-born in a family of less than five. She is married to a man who is employed in education or business, and they have two children above age twenty-one. She is between the ages of 45 and 54. She holds the master's degree from a public institution, and she entered administration between the ages of 21 and 35. Her present salary is less than \$23,000--about \$17,913. She enjoys the challenge of her job, especially the humanitarian service to students, and she is satisfied with her performance and job. She believes that women bring unique qualities to administration, and she agrees overwhelmingly that women have as much need for achievement as men do.

DEDICATION

This Dissertation is Dedicated to my husband, Bert, and our son, Bert, Jr.



#### ACKNOWLEDGMENT

A study such as this can never be accomplished by just one person; the cooperation of a number of people is a necessity. I am grateful to the members of my doctoral committee--Dr. Marian Franklin, Dr. Joseph Himes, Dr. Dale Brubaker, Dr. Joseph Bryson, and especially to Dr. Donald W. Russell, who have been most helpful with their ideas and suggestions. My colleagues at North Carolina A. and T. State University and UNC-Greensboro cooperated in the design and testing of the research instrument, and the women administrators took time from their busy schedules to answer questions for the study. To them I am grateful.

TABLE OF CONTENTS

|   | Page |
|---|------|
| DEDICATION . . . . .                                  | iii  |
| ACKNOWLEDGMENT . . . . .                              | iv   |
| LIST OF TABLES . . . . .                              | viii |
| CHAPTER   |      |
| I. INTRODUCTION . . . . .                             | 1    |
| Background of the Study . . . . .                     | 1    |
| Significance of the Study . . . . .                   | 10   |
| Statement of Objectives . . . . .                     | 13   |
| Organization of the Study . . . . .                   | 13   |
| II. REVIEW OF RELATED LITERATURE . . . . .            | 15   |
| Literature Related to the Current Status of Women     |      |
| Administrators. . . . .                               | 15   |
| Symbolism . . . . .                                   | 16   |
| Backgrounds of Women Administrators . . . . .         | 16   |
| Some Goals of Education . . . . .                     | 17   |
| Profiles and Status of Women Administrators . . . . . | 17   |
| Order of Birth . . . . .                              | 26   |
| Marital Status . . . . .                              | 27   |
| Characteristics and Career Patterns . . . . .         | 28   |
| The Position of the Dean of Women . . . . .           | 32   |
| Job Satisfaction . . . . .                            | 34   |
| Motivation and Aspirations . . . . .                  | 36   |
| Literature Related to Deterrents To Change. . . . .   | 38   |
| Sex Discrimination . . . . .                          | 38   |
| Sex Role Stereotypes . . . . .                        | 45   |
| Literature Related to Strategies For Facilitating     |      |
| Change . . . . .                                      | 46   |
| Role Models . . . . .                                 | 46   |
| Support Systems . . . . .                             | 48   |
| Old-Girl System . . . . .                             | 51   |
| Tactics . . . . .                                     | 52   |
| Attaining Positions . . . . .                         | 54   |
| Competitiveness . . . . .                             | 55   |
| Analysis of the State of the Reviewed Literature      |      |
| Showing Relationship to the Present Study . . . . .   | 55   |
| III. RESEARCH DESIGN AND METHODOLOGY . . . . .        | 58   |
| Statement of the Problem . . . . .                    | 58   |
| Definition of Key Terms . . . . .                     | 59   |

| CHAPTER   | Page    |
|---|---------|
| Scope of the Study . . . . .                              | 60      |
| Research Hypotheses . . . . .                             | 60      |
| Assumptions . . . . .                                     | 62      |
| Methods and Procedures . . . . .                          | 63      |
| Sources of Data . . . . .                                 | 63      |
| Construction and Testing of the Instrument . . . . .      | 64      |
| The Sample . . . . .                                      | 67      |
| Data Collection and Analysis . . . . .                    | 80      |
| Treatment and Interpretation of Data . . . . .            | 83      |
| Statistical Design . . . . .                              | 84      |
| <br>IV. ANALYSIS AND DISCUSSION OF DATA . . . . .         | <br>86  |
| Introduction . . . . .                                    | 86      |
| Position . . . . .  | 86      |
| Professional Experience . . . . .                         | 87      |
| Duties of the Position . . . . .                          | 93      |
| Biographical Background . . . . .                         | 95      |
| Educational Background . . . . .                          | 96      |
| Attitudes Toward the American Sex Culture . . . . .       | 103     |
| Categorical Duties Identified by Position . . . . .       | 107     |
| Academic Rank . . . . .                                   | 107     |
| Professional Experience . . . . .                         | 107     |
| Duties of the Position . . . . .                          | 117     |
| Biographical Background . . . . .                         | 120     |
| Educational Background . . . . .                          | 127     |
| Attitudes Toward The American Sex Culture . . . . .       | 127     |
| Categorical Duties Identified by Academic Rank . . . . .  | 137     |
| Salary . . . . .  | 140     |
| Professional Experience . . . . .                         | 140     |
| Duties of the Position . . . . .                          | 148     |
| Biographical Background . . . . .                         | 151     |
| Educational Background . . . . .                          | 151     |
| Attitudes Toward The American Sex Culture . . . . .       | 162     |
| Categorical Duties Identified by Salary . . . . .         | 162     |
| Summary . . . . .   | 168     |
| Impressions Gleaned From Informal Personal Interviews     | 170     |
| <br>V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS . . . . . | <br>172 |
| Summary and Conclusions . . . . .                         | 172     |
| Hypothesis 1 . . . . .                                    | 172     |
| Hypothesis 2 . . . . .                                    | 173     |
| Hypothesis 3 . . . . .                                    | 174     |
| Hypothesis 4 . . . . .                                    | 174     |
| Hypothesis 5 . . . . .                                    | 175     |
| Hypothesis 6 . . . . .                                    | 175     |

| CHAPTER  | Page    |
|--|---------|
| A Profile of the North Carolina Woman Administrator .  | 175     |
| Biographical . . . . .   | 175     |
| Educational and Professional . . . . .   | 176     |
| Attitudes . . . . .  | 176     |
| Implications For Usefulness Of The Research . . . . .  | 178     |
| Suggestions For Additional Research . . . . .  | 180     |
| Recommendations . . . . .  | 180     |
| <br>BIBLIOGRAPHY . . . . .   | <br>183 |
| <br>APPENDICES . . . . .   | <br>195 |
| A-Positions of Women Administrators . . . . .  | 196     |
| B-Data Collection Materials . . . . .  | 199     |
| Letter Accompanying Information Request . . . . .  | 200     |
| Information Request . . . . .  | 201     |
| Follow-up Reminder Letter . . . . .  | 210     |
| Topics Pursued During Interviews . . . . .   | 211     |
| C-Names and Addresses of North Carolina Institutions<br>Whose Women Administrators Received the Information<br>Request . . . . . | 212     |
| Biographical Sketch . . . . .  | 214     |

LIST OF TABLES

| Table  | Page |
|--|------|
| 1. Frequencies of Responses on Present Positions Held . . . . .  | 69   |
| 2. Frequencies of Responses on Academic Rank Held . . . . .  | 71   |
| 3. Frequencies of Responses on Salaries Received . . . . .   | 72   |
| 4. Frequencies of Responses on Age Ranges . . . . .  | 73   |
| 5. Frequencies of Responses on Educational Degrees Attained . .  | 74   |
| 6. Frequencies of Responses on Highest Educational Degree<br>Earned . . . . .  | 75   |
| 7. Frequencies of Responses on College Courses and Experiences<br>Believed to Enhance Preparation for Administrative Duties .  | 76   |
| 8. Frequencies of Responses on Advice to Prospective Women<br>Administrators . . . . .   | 78   |
| 9. Frequencies of Responses and Chi Square Statistics for Women<br>Administrators Identified by Position and Professional<br>Experience . . . . .                    | 88   |
| 10. Frequencies of Responses and Chi Square Statistics For Women<br>Administrators Identified by Position and Duties of the .<br>Position . . . . .                  | 94   |
| 11. Frequencies of Responses and Chi Square Statistics For Women<br>Administrators Identified by Position and Biographical<br>Background . . . . .                   | 97   |
| 12. Frequencies of Responses and Chi Square Statistics For Women<br>Administrators Identified by Position and Educational<br>Background . . . . .                    | 101  |
| 13. Frequencies of Responses and Chi Square Statistics For Women<br>Administrators Identified by Position and Attitudes<br>Toward the American Sex Culture . . . . . | 104  |
| 14. Frequencies of Responses and Chi Square Statistics on<br>Categorical Duties Identified by Position . . . . .   | 108  |
| 15. Frequencies of Responses and Chi Square Statistics For Women<br>Administrators Identified by Academic Rank and Professional<br>Experience . . . . .              | 109  |

| Table   | Page |
|---|------|
| 16. Frequencies of Responses and Chi Square Statistics For Women Administrators Identified by Academic Rank and Duties of The Position . . . . .                    | 118  |
| 17. Frequencies of Responses and Chi Square Statistics For Women Administrators Identified by Academic Rank and Biographical Background . . . . .                   | 121  |
| 18. Frequencies of Responses and Chi Square Statistics For Women Administrators Identified by Academic Rank and Educational Background . . . . .                    | 128  |
| 19. Frequencies of Responses and Chi Square Statistics For Women Administrators Identified by Academic Rank and Attitudes Toward the American Sex Culture . . . . . | 132  |
| 20. Frequencies of Responses and Chi Square Statistics on Categorical Duties Identified by Academic Rank . . . . .  | 138  |
| 21. Frequencies of Responses and Chi Square Statistics For Women Administrators Identified by Salary and Professional Experience . . . . .                          | 141  |
| 22. Frequencies of Responses and Chi Square Statistics For Women Administrators Identified by Salary and Duties of the Position . . . . .                           | 149  |
| 23. Frequencies of Responses and Chi Square Statistics For Women Administrators Identified by Salary and Biographical Background . . . . .                          | 152  |
| 24. Frequencies of Responses and Chi Square Statistics For Women Administrators Identified by Salary and Educational Background . . . . .                           | 158  |
| 25. Frequencies of Responses and Chi Square Statistics For Women Administrators Identified by Salary and Attitudes Toward the American Sex Culture . . . . .        | 163  |
| 26. Frequencies of Responses and Chi Square Statistics on Categorical Duties Identified by Salary . . . . .   | 167  |
| 27. Summary of Statistically Significant Differences Identified by Position, Academic Rank, and Salary. . . . .   | 168  |

## CHAPTER I

### Background of the Study

An examination of the social characteristics and career patterns of the women administrators in North Carolina senior colleges and universities brings into focus the plight of women in the work world of the American society. Initially, this study appropriately takes into account some of the prevailing customs and attitudes which affect the upward mobility of women throughout the Nation.

The increasing complexity of higher education requires the talents and abilities of women and men working together harmoniously. The higher education systems must change to include more women administrators because a potent force of creative and effective talent should not be ignored by our society. One often sees young men hired for their potential, given jobs they can grow into, and brought along in a process of collegial learning and mentoring. Women, on the other hand, are most likely to be hired for their accomplishments, if they are hired at all. If there are any questions about prior accomplishments or performance, women tend to be regarded as not yet ready and are advised to get more training and experience in order to be in a position to assume greater challenge in the future. The experience of women is in sharp contrast to that of men who are given access to administrative positions in which they can develop competence and who are given the opportunity to learn easily from each other (Touchton and Shavlik, 1978).

Attention is called to the viewpoints of Donna Shavlik (1978), the Assistant Director of the American Council on Education project--The National Identification Program For The Advancement of Women in Higher Education, and Judith Touchton, her colleague on that program. They espoused the timely belief that it is necessary for higher education systems to recognize the present and potential leadership of women. The present study of the social characteristics and career patterns of women administrators in North Carolina higher education has a valuable place. This assessment attempts to identify the influencing features which mold these leaders who consistently exhibit the courage and imagination to help Americans live in a more humane and equitable society.

In presenting the story of academic women in the United States, Jessie Bernard (1964) suggested that it can be divided into four periods. The first period began in the middle of the nineteenth century and continued to about the turn of the century. It is assumed to have been one of fairly rapid increase. The second period ran from about the turn of the century to 1920 and was one in which the rate of growth was at its greatest. The third period, in the 1930's, showed a marked slackening in the rate of growth. The fourth period, since the 1930's, has been one of steady decline.

The first period was one of the founding and proving of the women's colleges. The development of these colleges increased the need for the services of academic women. During the same period, the reform reflected through abolition, women's rights, temperance, prison reform, labor organization, and the higher education of women, affected the demand for academic women.



Converse (1939) found the following:

The women who came to teach in the women's colleges in the 70's and 80's and 90's knew themselves on trial in the eyes of the world as never women had been before--and they brought to that trial . . . heady enthusiasm and radiant exhilaration and fiery persistence.

The second period was marked by the burgeoning land-grant colleges and the development of conflict between reform in the women's colleges and academic quietism. Academicians tended to believe that the academic role was not an activist one. During that era, the home economics movement influenced women in academe to be service oriented rather than reform oriented.

The third period marked the beginning of a deceleration which has not ceased to this day. The percentage of academic women was affected by the great depression because in such a time, preference in hiring was given to men.

The fourth period, since the 1930's, has shown a steady decline in the proportion of women in academic positions.

Many of the early women's colleges, such as Vassar and Wellesley, were given to women by men, but they were administered and staffed by men (Arter, 1972). Although there were early women's college presidents of the female sex, like Alice Freeman Palmer of Wellesley and Martha Carey Thomas of Bryn Mawr, the administrative channel for upward mobility has not been one in which academic women have been preeminent. Bernard (1964) noted that administration does not appear to be a common channel of upward mobility for many academic women.

In this and similar free market societies, the demand for women workers varies greatly from time to time. The demand has been particularly

high during time of war and national need, when women have been drawn into the labor force to replace the men who are drafted into military service.

The first large-scale movement of women into the civilian labor force occurred during the Civil War, at a time when military production was sharply increasing and the supply of labor sharply decreasing. Women were needed on the job to carry on the war effort, and many of them left their homes to work in jobs that women had never worked in before.

Other large-scale movements of women into the labor force occurred during the First and Second World Wars, and to a lesser extent during the Korean and Vietnam wars. Similarly, during periods of full employment, which often coincide with wars, their labor force participation has risen, and during recessions and depressions it has declined.

In effect, women have been a reserve work force (or at least a dual work force) called into action, like the military reserves, during periods of national need, and then retired from service once the emergency was over. In general, as their labor force participation has grown, so have their educational opportunities.

Not all women workers are part of this fluctuating reserve labor force. A rising proportion of them has been highly placed in the labor force and fully committed to it. Hence, their response to economic cycles is not greater than that of their male counterparts.

In recent decades, the numbers of these fully committed women have been increased by rising educational levels, the tenure of women in their jobs, the growing need among women for financial independence, and the increasing awareness among women that they have a full commitment to work.

Sexton (1976) suggested that the question for the future is: To what extent can the force of law, operating against sex discrimination in schools and on the job, keep women from being retired to the reserves when the market no longer requires their services?

What is clear is that no matter how excellent the qualifications and job performance, a woman's opportunities for career advancement are influenced by the attitudes of society toward her role as a woman.

Suzanne Howard (1975) found that there is an elaborate education system which teaches women to underestimate themselves. Role expectations, peer group pressures, the media, parental training, the lack of role models (not seeing women in positions of authority)--all train the woman to know her place (Bem, 1973). Social practices which reinforce dependency, passivity, and non-assertiveness in girls combined with the "better dead than unwed" ideology teach a woman to pursue a husband, not a career. All too often, women have had at least twenty years of socialization which prevent them from thinking of themselves in positions of authority. American society conditions women to view authority as being unfeminine. That same society applauds a man who demonstrates self-confidence but labels a woman with similar characteristics as being aggressive.

A close look at some past career patterns of women will reveal that in the role of secretary, women were placed in offices where decisions were made; consequently, they began to understand some of the intricacies of the administrative world, and a few of them have found it possible to achieve promotions.

Although recent studies of women in academe indicate that women hold over 21% of teaching positions, they are represented disproportionately in the lower ranks and in non-Ph.D.-granting departments of less prestigious colleges and universities (Deckard, 1975). Thus, Palley (1978) found that during the 1975-76 academic year, only 5.6% of full professors at major Ph.D.-granting institutions were women; at two-year colleges, 20.8% of full professors were women. At the other end of the rank structure, women represented 24.5% of assistant professors at the major Ph.D.-granting institutions; at two year colleges, 36.8% of assistant professors were women. For the 1975-76 school year, the American Association of University Professors (AAUP) reported that 64% of academic men had tenure, whereas only 46% of women had tenure. Furthermore, though there are some women who hold administrative positions in American post-secondary institutions, as recently as 1970 in all colleges and universities with over 10,000 students, there were no women presidents and no women vice-presidents. At these institutions, 12% of the academic deans were women and 17% of the assistant and associate deans were women. Deckard (1975) notes that among the latter two categories were deans of schools of home economics and nursing--traditional female bastions.

Whereas family responsibilities do not seem to interfere with the mobility of males in academic administration, they do interfere to the detriment of women. Palley (1978) suggested that this condition related to the mobility constraint for women may be caused by early sex role socialization which sets home and family responsibilities primarily in the woman's domain, regardless of whether or not she is employed outside the home.

However, whatever the cause, it is a reality that family responsibilities alter career patterns for women with career goals in academic administration in ways in which they do not affect men. From her 1978 study, Palley concluded that even if discrimination based on sex is not a manifest function in contemporary colleges and universities, it remains a very powerful latent function. It is interesting to note that many women feel compelled to choose between career and marriage; however, men comfortably achieve both simultaneously.

Although the attention of federal civil rights enforcement officials recently has been directed toward discrimination against racial minorities, these officials are now focusing on the plight of another "minority" (51% of the population). Women have received the attention of civil rights enforcement officials because of several factors. An awareness of social trends reveals that today, nearly half the women in the United States work; that amounts to more than 33 million women, representing 40% of the work force (Boyle, 1977). Obviously, women's place is no longer necessarily in the home. Additionally, women work for the same reasons men do; money, self-satisfaction, and fulfillment. Sixty percent of the women in the work force are either single, divorced, widowed, or married to a man who earns less than \$7,000 a year (Boyle, 1977).

Some progress has resulted from legislation designed to insure the rights of women. The Equal Pay Act of 1963, an amendment to the Fair Labor Standards Act, prohibits discrimination on the basis of sex in the payment of wages for work requiring equal skills, effort and responsibility, and performed under similar working conditions.

Title VII, Civil Rights Act of 1964, prohibits discrimination in all phases of employment. Executive Order 11246 and Revised Order 4(1972), make it imperative for companies that wish to bid on--or keep--federal contracts to establish affirmative action programs that ensure equal promotion and placement opportunities for women in all ranks (Boyle, 1977).

The Women's Equal Rights Movement has had a strong impact on American society. By use of demonstrations and court suits, the level of consciousness of women has been enhanced.

Bernard (1964) stated that it is a common diagnosis of the characteristic problems in the relationships between the sexes to say that they result, in part at least, from the fact that men and women are in competition with one another. In industry, in the professions, in the home, in fact everywhere it is alleged, a competitive atmosphere exists which embitters the relationships between men and women. Although there is a surface appearance of validity in this allegation, a deeper probing of the situation suggests that the precise opposite is--and has been--true for most women. To many, it appears that women refuse to compete in the labor force for the values set up by men and refuse to compete for the top jobs.

Dael Wolfe (1954) has summarized some of the early studies of competitiveness, or rather, noncompetitiveness, in working women, and concluded:

Taken at their face value, these studies point clearly to the conclusion that the typical goal of an employed woman is not promotion and advancement in her chosen field. The strongest wish is for marriage and a home. When that wish cannot be realized, continuation in the same or a similar job is a more frequent goal than is promotion. The typical employed woman, in short, is not wholeheartedly in competition with the man.

He warns against taking the results at face value and suggested that perhaps the noncompetitiveness of women may be a defensive reaction against sex discrimination.

In analyzing the role of working women, Pifer (1976) suggested that in the educational realm, a large number of changes can be made that will have an influence on equal opportunity for women in the world of work. These measures would affect every level of education, from preschool to graduate training. They include a continuing attack on sex-stereotyping in curricula and in educational materials, new efforts to interest girls in mathematics and science during high school years, attention to counseling at both the high school and college level to the relationship between course selection and later occupational choice, new programs to encourage women to enter male-dominated occupations where the prospects for advancement and high pay are good, particular efforts by college placement officers to help women find jobs in areas where they are not well represented and, finally, the expansion of opportunities at colleges and universities for adults to earn degrees or otherwise add to their qualifications through part-time or external study. All phases of education show the effects of past discrimination against women. Throughout America, there are very few women who are principals and female superintendents are even more scarce. In higher education, relatively few women have been appointed to senior administrative positions, and the same is true in regard to tenured faculty positions.

There is a great deal that women can do to make themselves more effective in the administrative environment. Women who recognize this and proceed to act on it will inevitably affect the assumptions and attitudes

of men in administration and just as inevitably the beliefs and assumptions that underlie women's traditional roles in the family and society (Hennig and Jardim, 1977).

There remains a dearth of role models in colleges for young women potentially interested in mastery or in leadership roles. The leadership in higher-echelon school administration remains predominantly male, and this seems to be increasing.

#### Significance of the Study

The positions of women in colleges and universities have long been a focus of more rhetoric than research. Most of the studies on women in administrative positions in colleges and universities reveal one universal rule--the higher, the fewer. The Carnegie Commission Report (1973) documents a well-known fact of academic life: the higher in the academic hierarchy one looks, the fewer women are found. In spite of legislative pressures and those applied by affirmative action programs, change has been extremely slow. With the prevailing prediction of reduced university growth because of the decline in the birth rate, it can be expected that the number of women faculty and administrators may actually plummet as a result of that trend.

Throughout the United States, in 1976, only four (1%) public institutions of higher education with enrollments of more than 10,000 have women presidents. As is the case nationally, more than half of the women's colleges are headed by men (Howard, 1978). Between the periods 1967-70 and 1973-76, the number of female presidents of women's colleges had decreased from 47% to 37%.



The Women's Bureau of the U. S. Department of Labor published statistics (1976) that show that between 1955 and 1974, fully employed women of either white or minority races continued to earn less than their male counterparts. The earnings differential actually was wider in 1974 than it was 19 years earlier. Women who worked at year-round full-time jobs in 1974 earned only 57 cents for every dollar earned by men. In fact, men's median weekly earnings exceeded women's by about \$97, and women had to work nearly nine days to gross the same earnings men grossed in five days. While these facts are known to be the case in the overall labor force, it was important to determine whether this was also true in higher education in North Carolina colleges and universities. Research was needed to delineate the problems of women and to suggest ways to meet them.

This study sought to substantiate the stated need for role models in addition to the psychological support and encouragement of other women. Another purpose was the identification of what institutions of higher education should be doing to equip women to advance into the central administrative structure. Additionally, women needed ideas on what they should be doing for themselves and for other women.

Much is being written today on the changing role of the woman in our society. Most of what has been stated about discrimination of women in business, politics, the home, and in general employment can also be applied to education and job opportunities at the higher administrative level of education.

The fact that the percentage of women in administrative leadership posts in education during the past four decades has steadily declined

is regrettable. In spite of the fact that women comprise four-fifths of the elementary and almost one half of the secondary teaching staff, women total less than one fourth of the faculty in higher education. This situation seems to indicate that the female population still represents a reserve of under-utilized talent.

Most of the recent studies conducted on women administrators show a paucity of women in administrative positions and a decline in the number of women in academe during the last two decades (Graham, 1973). The Carnegie Commission Report (1973) on women in higher education revealed that women are poorly represented on college faculties and are even more scarce in top academic positions.

America, noted for squandering its resources of land, water and air, also wastes much of its higher education product. It has put woman through the academy and then placed her on the shelf.

The present study was conducted during an era of national focus on the maximum utilization of human resources, the rights and responsibilities of the individual regardless of sex, the provision of an appropriate mix of role models for emulation by students, and the strengthening of educational opportunities in the American tradition of freedom.

There is a necessity for female role models in the decades of the seventies and eighties when equality of opportunity is a professed national goal. The public sector that holds the greatest responsibility for shaping the minds and careers of our future citizens is still guilty of serious discrimination on the basis of sex. There is an urgent appeal to have the next decade bring real equality for women who aspire to leadership positions.

The present study resulted in the identification of some key implications for insuring strong and equitable administrative teams for the colleges and universities in North Carolina.

#### Statement of Objectives

Position, academic rank, and salary were the key variables around which the present study sought to show relationships to the professional work experience, educational background, duties, biographical background and attitudes toward the American sex culture represented in the responses of women administrators in North Carolina higher education. The researcher was interested in assessing the present status of the women who hold administrative positions in the colleges and universities of North Carolina. The researcher sought to identify important and influential features which brought the women into administration and the attitudes held by these women about their present and future plight.

#### Organization of the Study

The first chapter discusses a background of the study, a statement of the objectives, and significance of the study in addition to the organization of the study.

The second chapter includes a review of related literature and research, specifically on the condition of women in the field of education with emphasis on administrative leadership. Emphasis was placed on the current status of women administrators, deterrents to change and strategies for facilitating change.

The third chapter presents the statement of the problem, research hypotheses, scope of the study, assumptions, definition of key terms, and key features about the data. Other features included in the third chapter are methods and procedures, treatment and interpretation of data, sources of data, and the processing measures used in the development of an assessment instrument and its related distribution and collection.

The fourth chapter presents the findings and analysis of the findings from the responses to the research information requests.

The fifth chapter contains a summary of the information obtained from the survey, conclusions drawn, based on interpretations of the data, recommendations of the researcher, and statements on implications identified by the study.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

This review of literature encompasses research studies, books and feature articles about the various aspects of women in administrative positions in educational institutions. The order of presentation seemed to be a logical sequence. As one examines the present-day plight of women administrators in higher education, the current status includes background information, profiles of groups of women studied and their related career patterns, including those factors which have tended to motivate these subjects. The next phase focuses on the deterrents to change with emphasis on sex discrimination. As a logical sequence, the review examined literature which introduced strategies and tactics for facilitating change in a positive direction. The studies included in this section revealed findings on the need for positive female role models and the recognized value of support systems to promote the efforts of women to attain administrative positions. The researcher selected the reviewed literature which specifically possessed a relationship with the present study in the nature of its undertaking.

#### Literature Related To The Current Status of Women Administrators

### Symbolism

Bernard's Academic Women (1964) provides background information on women in administration in colleges and universities. This classic reference traces the status of women in education beyond the pioneers who were the first American women students, professors and college presidents. This historical presentation notes that students of symbolism have difficulty explaining why it is that colleges and universities are pictured as females and intellect is associated with the goddess, Minerva, whose name was derived from the Sanscrit, Greek, and Latin word for "Mind." Mythological records show that there was nothing anomalous in having a goddess rather than a god of wisdom or in having wisdom (Minerva) triumph over violence (Mars), so there must have been at least a few human models for this imaginative conception--women who were strong, even militant, but wise and contemplative at the same time. Bernard's (1964) sociological presentation of the status of academic women reveals some impeding stereotypes, constraints and barriers which result in the low incidence of women in top-level administrative positions in academe.

### Backgrounds of Women Administrators

Hennig and Jardim (1977) discussed the different backgrounds and assumption that men and women bring to their work experiences and how these differences affect career development. A study of 25 successful women managers identified the background and behaviors that contributed to their success. Recommendations for making women more effective and for increasing corporations' and male managers' understanding of working women were offered. Similarity to the present study was found in the

concern for the marital status of the women studied. Hennig and Jardim (1977) found that an interesting pattern developed among her study participants in that they concentrated on careers until they reached the approximate age of thirty-five when a high percentage of those managers decided to seek marriage to make their lives complete. At that point, a pre-occupation with femininity emerged. Most of her subjects had had strong relationships with their fathers who had exposed their daughters to experiences from which girls are usually shielded.

#### Some Goals of Education

Koontz (1972, pp. 45-47) submits her belief that the role of women as the world's educators may come into focus if the ultimate goal of education, whether in the cave or within ivied walls, is to teach the individual how to relate, to cope, and to change. Each child, to survive must be taught to relate to himself, to his environment and to whatever moral, ethical, physical and psychological values are thrust upon him by his superiors, peers and subordinates. He must be taught to cope as an individual and as a member of a structured group in a physically unfriendly environment. He must be taught to effect change, hopefully for the better.

#### Profiles and Status of Women Administrators

A study of eighty women in leadership positions in North Carolina (Norman, 1970), from 1967-1969, was undertaken to explore the characteristics of women leaders and to relate and compare these characteristics to male leaders. Results of the personality questionnaire indicated that the women leaders participating in the study were more

intelligent, more abstract in their thinking and had higher scholastic capacity than 91.8% of the general population. The findings prompted the author to comment:

A composite picture of women leaders in North Carolina pictures these women as women of high intelligence, confident, self-assured, sufficient, resourceful, temperamentally independent, uninhibited, able to face wear and tear without fatigue, socially precise, with a strong self-image, imaginative, self-motivated, creative, shrewd, calculating with an intellectual approach to the situation. These women leaders are high in ability to initiate structure in an organization, and are considerate, taking into account regard for well-being and status and contributions of followers, scope of initiative, decision and action. They can tolerate uncertainty and postponement and can reconcile conflicting demands and maintain cordial relations with superiors.

The purpose of the Arter research (1972) was to investigate the role of women in the administration of state universities and land-grant colleges.

The researcher attempted to answer the following questions based on information solicited from college and university presidents or other chief officers during the academic year 1970-1971: (1) What proportion of top-level administrative positions was held by women in state universities and land-grant colleges? (2) How many women have been appointed to such administrative posts in the past five years? (3) How many women have applied for and been considered for administrative vacancies in the last five years in state universities and land-grant colleges? (4) What were the stated attitudes of state university and land-grant college presidents or other chief officers in hiring qualified women in accordance with the specifications of a top-level job and in giving equal consideration to such women? Some of the findings



from this segment of the population revealed the following: The median number of full-time professional faculty in the state universities and land-grant colleges was 685. The approximate ratio of male to female faculty members in state universities and land-grant colleges was 5:1. Over one half of the state universities and land-grant colleges did not have women in top-level administrative positions. The median number of males in top-level administration was 18, while the median number of females was zero. Over one half of the institutions queried did not appoint women to administrative posts in the last five years prior to the study. Over one third of the institutions did not consider women for administrative posts during the last five-year period. Ninety-three percent of the institutions surveyed stated that they would consider qualified women for top-level administrative posts. In the Arter (1972) study, information was also solicited from women administrators in state universities and land-grant colleges to attempt to determine if there were a relationship between position, academic rank, and salary and personal background, educational background, professional experience, duties and responsibilities, and attitudes on employment status. She found that there is a relationship between the position of women in top-level administration and the birthplace of their fathers, the occupation of their mothers, whether or not they have children, the provision of child care, the number of years devoted to childbearing, what they thought helped them gain their positions, to whom they were directly responsible, and their reasons for working.

Arter (1972) discovered that there is a relationship between the

academic rank of women in top-level administration and their ages, the type of institution attended at the master's and doctoral level, the reception of financial aid at the master's level, the number of positions held, the number of states in which worked, what they thought helped them gain their positions, for what they were responsible, and their reasons for working. Another interesting finding was that there is a relationship between the salary of women in top-level administration and the geographical regions of employment and birth, the occupation of their fathers, the education of their mothers, the type of institution attended at the master's and doctoral level, the holding of a doctoral degree, what they thought helped them gain their positions, to whom they were directly responsible, for what they were responsible, whether they carried out policy or transmitted decisions, and the availability of tenure as administrators.

Arter's profile which was developed for these women studied on a national scale revealed that women administrators are first born in a family of two children; father was a professional man who went to college but had no degree; mother was born in South, housewife, attended high school; over 50 years of age; no children; if children, they are over 18 years of age and are away in school. The educational background of a typical woman administrator showed her high school class to be under 100; she received her B. A. Degree from public institutions with no financial aid; received M. A. Degree from public institution with no financial aid; she had no doctoral degree; if held, she received the Ph.D. Degree from a private institution in the Northeast with scholarship, assistantship, or fellowship, and she was not then enrolled

in a graduate program. In the realm of professional experience, the typical woman administrator held a position at the administrative level below assistant dean; she was less than professor in academic rank; her salary was below \$20,000; she had held from one to five positions; she had served in one to three institutions with the initial institution being non-higher education. She had worked in one state and had not changed geographic regions. She became an administrator when she was over 35 years of age; her qualifications helped to gain her administrative position, and her advice to successors included the suggestions to have friends, know the institution, and possess certain positive personality characteristics. The profile of the typical woman administrator during the period 1970-1971 showed that she planned to remain in administration. If married, her husband's attitude toward her working was favorable. Service, dedication and challenge ranked highest as reasons for working. She occasionally found it an advantage to be a woman; she did not consider sex a factor in selection or promotion but did not think women are promoted as readily as men. The typical woman administrator considered the representation of women in administration unfavorable in proportion to the women enrolled in her institution.

In 1971, The American Association of University Women (AAUW) sponsored research entitled Campus 1970--Where Do Women Stand? This study was conducted by Dr. Ruth M. Oltman. By use of an instrument sent to presidents of 750 institutions, it was found that in spite of the fact that the respondents gave affirmative answers to a question on their policy to include women in top-level administrative positions and those

involving policy-making decisions, the actual participation of women in administrative policy-making in higher education is conspicuously lacking. Instead, the women are working at jobs requiring skills and attention to detail but without much relationship to policy-making or influence. Generally, they are in positions at middle management level or which involve sex stereotypes, such as Dean of Nursing.

The study pointed up the comparatively greater opportunities for women in the administration of women's colleges with under 1,000 enrollment, especially in certain categories. In addition to the position of Dean of Women, women are most likely to hold positions such as head librarian--except in colleges with enrollment over 10,000 where the librarian is a man--director of placement, director of financial aid or college counselor. They are least likely to be found in the positions of president, vice president, director of development, business manager, academic dean, dean of students, director of counseling, and college physician. The Oltman study (1971) showed that there appear to be broader opportunities in woman's colleges, fewer in the large universities for women who aspire to be administrators.

The Patrick (1973) study on personality and family background characteristics of women who enter male-dominated professions focalized on careers of lawyers, doctors, architects and scientists. The comparison group was composed of women college graduates and differed largely in that they did not have advanced degrees and were engaged in full-time homemaking. The comparison group resembled the professional group in type of college attended, age, and religious background. The hypothesis that professional women are motivated to achieve for the sake

of pride in competence while homemakers are motivated to achieve for the sake of approval was supported.

Sexton's book (1976) honestly assesses the situation of women in education. Her facts overturn the familiar argument that sexism pervades both schools and society. She indicated that the composition of the education profession reflects increasing disadvantage at higher levels. College teachers are less likely than elementary or high school teachers to be women, and as one goes up professorial ranks, the proportion of women decreases while the differential between their pay and the pay of their male colleagues widens. The same pattern occurs in educational administration. An appallingly small proportion of elementary principalships are held by women, but it is considerably larger than women's share of high school principalships, superintendencies (.5% in 1971, according to Sexton), college administrative positions, and district, state and federal policy posts. In spite of the bleak prospect for women in educational administration and the underrepresentation of women at the higher levels, Sexton stated that education does considerably better than do other industries at promoting women into managerial positions. Among managers and administrators in education 32% were women in 1970 compared with 7% in manufacturing, 21% in retail trade, and 17% in industries overall. Sexton indicated that college women have nearly equal opportunities for success in college but very unequal opportunities for career success. Considering the position of women in education relative to other industries, one might think about the relationship between educational and economic institutions. To the extent that schools function as job training and credentializing

institutions, they are part of the vicious circle that entraps women workers. Because of their unique opportunity to teach, schools should be encouraged or required to go beyond equal treatment; that is, to make special efforts to overcome the disadvantage women face in other areas of the society. Women grow up in families that often embody traditional sex role attitudes; therefore perhaps schools should try harder to challenge sex role stereotypes. Since women face stereotype career options, perhaps schools ought to make special efforts to acquaint women with non-traditional career choices. Since women tend to develop believing there are certain skills--like mathematics, mechanical drawing, and athletics--which they cannot learn, perhaps schools ought to teach them that they can.

The investigation of factors related to the employment level of women administrators in Big Ten universities caused Florence Stevenson (1973) to focus on the following findings: (1) Titles and levels of positions of women administrators indicate limited individual professional support. Need is felt for clear delineation of the responsibility along with general trust and confidence from superiors in their ability to fulfill it. There is growing awareness of the need for and willingness of women to support each other professionally. (2) There are differences among groups of women administrators in Big Ten universities, the most salient of which is, by age. The largest group, the 104 who are 34 years of age or younger, are pursuing doctoral degrees in the greatest numbers, have the highest percentage who are married but mostly have no children; the group from 35 to 44 years

old show less evidence of strong career orientation, highest ratio of children per mother, are mostly at mid-level positions; the group from 45 to 54 years old reflect the greatest number at higher level positions, and the persons 55 years and older, the smallest group, showed the greatest diversity in position level and the highest percentage with the doctorate. In the group between ages 45 and 54, seventy-nine percent hold the doctorate and the remainder the master's degree. Eighty-four percent are in a field of work appropriate to their most recent degree, and 89% had previously been administrators or in their own specialty field. Interestingly enough, 84% last moved within their own institution rather than changing universities; over half had been in their current positions one year or less. (3) Women administrators felt that there were several causes for their lack of advancement--sheer discrimination, lack of assertiveness, interrupted career spans, not being sponsored by those above them, not uniting to improve their position. Factors believed to have contributed to the above include the socialization of both sexes, women rejecting responsibility, and men supporting other men, not women. (4) Women administrators in Big Ten universities are lacking in the following factors considered by management theory to be important for career development: sponsorship, management training, informal interaction particularly among male co-workers, support in their personal lives and clear goals. Those few who have had some form of management training or internship for higher level administration, have a more positive attitude toward that profession.

(5) For age groups, there were statistically significant differences between age groups and the following variables: position level, level of education, date of highest degree, number of years in previous position, access route, number of years in current position, marital status and numbers of children. For position levels, there were statistically significant differences between position levels and the variables age, levels of education, date of highest degree, number of years in previous position and access route.

Profiles of selected women college presidents reflecting the emerging role of women in higher education were developed in a study by Tessler (1976). The study revealed that four leadership characteristics recognizable in woman presidents are their responsibility, realism, efficiency and energy. In the analysis of women college presidents' perceptions, all of the presidents agreed that affirmative action and the Equal Rights Amendment have a definite effect on the status of women and the achievement of women's goals.

#### Order of Birth

In Chemers' (1970) study on the relationship between birth order and leadership style, the researcher administered Fiedler's Least Preferred Co-worker (LPC) form to university students to examine the relationship of birth order and adult leadership. Results showed that firstborns are more task oriented and later-borns are more concerned with relationships and social orientations.

The current study sought to identify the birth order of the respondents to find whether they were firstborn, later-born or last-born. Neisser (1957) stated that in some groups, the eldest tends to



become a leader and a stable, dependable individual. That theory was not borne out in the Arter (1975) study which found that the order of birth is apparently not significant.

In discussing exceptional women, Epstein (1970) believed that the qualities of the environment of first or only children are of greater consequence because of isolation and a feeling of being special.

In Astin's (1969) study, the parents of women holding doctorates were highly educated as compared with the general population, thus leading one to believe that children of highly educated parents are motivated to seek further education.

#### Marital Status

In an effort to review research studies on the effect of marriage on careers, the chief data found referred to psychologists, not all of whom were academic persons. Although the effects were somewhat different for those with full-time employment and for those with less than full-time employment, the general picture painted by Bryan and Boring (1947) was one in which 28% of the married women reported marriage to be a professional asset and 34% reported it a hindrance. Among the part-time psychologists, about one-fourth (23.9%) gave marriage as the chief factor in abandoning their careers. By way of contrast, 72% of the men found marriage a professional asset and only 5% found it a hindrance.

An interesting finding of the Schlack (1974) study was that women who were married scored higher on the consideration dimension of the Leadership Opinion Questionnaire, and oldest children and oldest female children scored higher on the Structure dimension of the Questionnaire.

In a study of women administrators in nontraditional positions in public coeducational higher education, Agnes Fecher (1972) discovered that they feel that being a woman or being married is neither an advantage nor a disadvantage to administrators. Her subjects also tended to remain at the same institution rather than pursuing possibly more rapid advancement elsewhere. Fecher concluded that it is advisable for women who wish to advance in administration to seek employment in non-baccalaureate-granting institutions where conditions are more favorable for women.

An investigation of such institutions centered on California's ninety-two public community colleges. The study focused on the twenty-six women in the three highest levels of administration (Pfiffner, 1972). All the subjects had at least a master's degree, and 23% had the doctorate. Most were married (an average of twenty-five years), and 73% were either an only or the eldest child. The qualities they considered most important in an administrator were the ability to work with others, a strong personal value system, fairness and objectivity, sensitivity toward people, and humor and humility.

#### Characteristics and Career Patterns

The Douglas (1976) study analyzed the demographic characteristics and career patterns of 425 women administrators in 356 four-year institutions in the United States. The results indicated the following conclusions: The modal administrator was forty-four years or older, firstborn, and from a small family of average means. She was married to a professionally employed, well educated husband and had no children. Her father completed grammar school and her mother had a high

school education. Her father was a business owner. She was a graduate of a four-year coeducational college with a degree in the humanities. Her highest degree was a master's degree. Career-wise, she was more likely to be a nonacademic than an academic administrator, had few periods of unemployment over the years, had been primarily employed at one college, and had decided rather late in life to be an administrator.

The major differences between academic and nonacademic administrators were as follows: the average academic administrator was older, held a Ph.D degree, and held the rank of professor. The average nonacademic administrator held a master's degree, held no rank, and had little teaching experience. Academic administrators' most common career route was that of academic position to academic administrator. Non-academic administrators exhibited no definite career route. Douglas found that institutions of higher education should realize, contrary to widely held beliefs, that women administrators do not have periods of career discontinuance, but instead maintain continuous employment and dedication to one institution.

Career patterns of women administrators in higher education with emphasis on barriers and constraints attracted the interest of Gasser (1975). The purposes of that study were : (1) to identify the personal, cultural, and professional factors which women administrators had found to be positive and negative influences in their career advancement; (2) to ascertain if there were significant differences in the lifestyles, professional qualifications, and career attitudes of women who had achieved prestigious administrative positions and those who are in lower level administrative positions; and (3) to determine if women

administrators' career aspirations include appointment to higher level administrative positions. The analysis of the data resulted in these findings among others unrelated to the present study: Positive influences on career development included parental support for career goals, encouragement from faculty, contact with an active career woman, support from colleagues and supervisors, and acceptance of responsibility and hard work. Geographic mobility, Affirmative Action Programs and encouragement from high school teachers and counselors were not considered to have been positive influences in career advancement by the majority of the respondents. Among the negative influences on career development were interruption of employment, lack of mobility to accept advanced positions and non-acceptance as a professional peer. Inadequate child-care facilities and the lack of opportunities to serve on university committees also were considered to have negatively influenced career development.

An overwhelming majority of all respondents felt that women had the requisite ability, commitment, interest, and desire for responsibility and authority to be appointed to upper level administrative positions.

The Gardner (1966) study dealt with quantitative information on career patterns of women administrators in institutions of higher education in Illinois. Gardner collected facts concerning biographical, educational, and professional backgrounds, which were considered to be of importance in influencing career patterns. An analysis of the findings justified the following conclusions: A majority of the respondents were from families having one or two children; three-fourths

of the respondents were from families of three children or less. Therefore, women administrators tended to come from small families. Two thirds of all subjects were not married; therefore, single women more successfully attained administrative positions than did married women. Since 78.4% of the women had a master's degree and 17.6% had a doctorate, this indicated that a master's degree is a requisite to an administrative position, and a doctorate is helpful. Women who became administrators had followed a career path which usually began with office work or teaching positions. They then served as an assistant to a person holding a similar position to the one they then held as administrators. Librarians tended to find their entry jobs as noncollege librarians. Women administrators, with the exception of the librarians, gained their positions for reasons other than specific course work taken at college. Women tended to become administrators between the ages of 25 and 35; however, women did become administrators anytime from the age of 20 until they were past 50.

Personal characteristics necessary for a successful administrative career were the ability to understand people, the ability to organize, and the willingness to accept responsibility. Most women administrators reached their status on their own initiative. Those who were aided to achieve their positions found this help in a former employer or supervisor or in another school administrator.

Holmstrom (1972) found, in reviewing the career patterns of women, three types of discrepancies between formal job titles and actual work activities were discovered. First, there were women who, even when unemployed, still pursued professional activities. Second, there were

women who had been demoted in terms of the prestige of the formal positions they held, even though their professional skills and reputations were on the rise. Third, there were cases of discrepancies between title held and the type or amount of work actually done. All three of these phenomena are connected to the peculiar place which women presently have in the occupational system. In essence, the researcher found discrepancies between appearance and reality when scrutinizing career patterns of women. The appearance which refers to formal job title and position differs from the reality of work a person actually performs.

The majority of the California higher education women administrators in the Walsh (1975) study on career patterns reflected these findings:

(1) They entered administration by chance with less than a third having considered it as a possible career field prior to actual professional experience. (2) They reported a high degree of career satisfaction. (3) They had not interrupted their careers; however, among those who had, a large proportion had done so because of family responsibilities. (4) They identified an unsolicited job offer as the most facilitating event in their career development. (5) They indicated the "old-buddy" system as the most effective method of learning about their present position. Those women who reported having faced a problem in their career development ranked discriminatory practices most frequently as the major obstacle encountered.

#### The Position of The Dean of Women

McBee's (1961) examination of the position of the Dean of Women focused on these areas of concern: (1) From whence it came, (2) where it

is going, and (4)where it should go. Her study covered the state of Tennessee where she interviewed three administrators at each of the six colleges which were selected. These persons usually included the President, Dean of Students and the Dean of Women. The information received from the interviews served as a corroborative medium for her historical research. The researcher defined the role of the Dean of Women as teacher and noted trends associated with her position. There tended to exist a dropping of the title "Dean of Women," a consistent weakening of the image of the dean as disciplinarian, a centralization of personnel services, and a marked interest in the total higher education program.

Gillies (1975, pp. 156-162) defended the continuation of the title "Dean of Women," with modernization of the function to fit a contemporary society and its concomitant needs. Although the traditional function of the Dean of Women had been predicated on a Victorian attitude that accepted female students as an intrusive minority within ivy covered walls built and intended for men, with the arrival of women who are mature and capable, especially those in their thirties and above, some educators came to recognize that women have rejected the implicit control and supervision of a mother figure. Therefore, it is believed that a Dean of Students can serve both sexes impartially and collectively. Gillies advanced the belief that there is doubt whether argument to support the phasing out of the title "Dean of Women"justifies the conclusion and possible results. She contends that the same conditions that support the argument can be used to validate the retention of the position of a Dean of Women, with her

function redefined to accord with contemporary circumstances and trends. To dispense with a high administrative post held by a woman may depose women from the policy-making levels of many institutions. In other words, a negative outcome that should not be overlooked can arise from the subsumption of a women's dean under the aegis of a Dean of Students who is likely to be a man. This may replace a female role model with a male role model and prevent the evolution of a necessary but scarce female role model for women students.

Gillies (1975) suggests the retention of a woman in a position that addresses the needs of women students as they seek to identify their purpose and mission in a contemporary society. The women's dean should assume the initiative for modifying or changing the traditional educational structure by supporting non-traditional programs such as continuing education, women's studies programs, special programs for very young women, mature women, and minority women. Since the present study encompasses the administrative staffs of higher education in North Carolina, it revealed the extent to which educators have agreed or disagreed with the arguments in favor of retention of the position of Dean of Women. This position was selected to be reviewed in the literature because it typifies an administrative position in higher education which has been traditionally held by women.

#### Job Satisfaction

In analyzing job satisfaction of women administrators in higher education, Reeves' (1975) research sample represented a cross-section of academic fields in large midwestern public and private universities.



Sixty-three percent were not working in their original career choice. Approximately 5% were employed at a lower level than the original goal; the remaining 32% had achieved to a far greater extent than they initially hoped. A comparison of single and married respondents produced some interesting data. Fifty-six percent of the single administrators indicated a high degree of job satisfaction compared with 71% of the married group.

An analysis of the respondent's level of education and job satisfaction demonstrated that women with Bachelor's degrees who serve in administrative positions are highly satisfied, but women administrators with Master's degrees showed a very high satisfaction rate. Among women with earned doctoral degrees, 47% indicated satisfaction and a sense of performing valuable work. However, the majority of women with earned doctorates verbalized dissatisfaction with their work.

An additional aspect was studied. Each respondent was asked if her career choice were self-selected, parent-selected, parent-influenced or strongly influenced by friends or teachers. Of the group indicating self-selection, 61% affirmed a high degree of job satisfaction. Those who stated that friends or teachers had influenced their decisions also indicated a high degree of job satisfaction. On the other hand, 75% of the women administrators whose parents were the prime factor in career choice indicated a high level of dissatisfaction. In the Reeves (1975) study, the reasons for lack of satisfaction were varied but the recurring themes were: being required to spend too much time on non-essential paper work; being assigned tasks no one else wants to do; and

responsibility without authority. In that study, some administrators indicated that their job climate had been better before the emphasis on Women's Rights; the impact of the Women's Movement had, in some instances, created an invisible barrier rather than a bridge. Those administrators believed that they are now being viewed as a threat instead of being respected for their abilities.

#### Motivation and Aspirations

In 1975, Katherine Goerss conducted a study to identify those personality factors which are shared by women in upper echelon administrative positions in institutions of higher education. Although the 52 respondents held the positions of President, Vice President Vice Chancellor or Dean, only 30.75% indicated that they aspired to a higher position than the one held at that time.

The fear of discrimination, the absence of encouragement, the prospect of feeling uncomfortable in a position of authority are some of the attitudes of women which may explain the lack of aspiration or the lack of upward mobility. Many women do not seek administrative positions because they fear failure, are uncertain about their ability to handle conflict, or are reluctant to accept policy making roles (Gasser, 1975).

Despite the negative attitudes toward women in administration and the lack of aspiration for administrative positions stated by women educators, women do become administrators. Several studies concluded that women become top-level administrators by accident or through the unsolicited help of a supervisor. Women administrators emphasized the importance of support from their families and mentioned that recent

feminist awareness encouraged their promotions. Women felt that they were expected to have more credentials and to meet higher standards than men do when applying for administrative jobs (Gasser, 1975). Status, recognition and the need for achievement were the three major motivators for women who wanted the challenge of leadership roles (LaBarthe, 1973). In the LaBarthe study, it was found that factors dealing with internal feelings and concerns were more important to the women than external or maintenance factors such as salary and working conditions. Women indicated that they need to be recognized and treated as equal to men when they produce as effectively as men in similar responsible positions.

The King (1974) study concentrated on two populations in community colleges--the presidents and the female vocational faculty. An examination of the perceptions of these public community college presidents revealed the following: (1) the presidents agreed that professional women faculty experience some role conflict; (2) there were inconsistencies in the administrators' perceptions concerning advancement possibilities of female vocational faculty; and (3) most administrators agreed that female faculty have moderately high career aspirations.

An examination of the perceptions of female vocational education faculty members at public community colleges revealed the following: (1) They are ambivalent concerning their dual role; (2) most female vocational faculty perceived their advancement possibilities as being poor; and (3) seemingly supportive of the above findings, these women also have low career aspirations. When the perceptions of female vocational faculty members were compared to those of college presidents,

the most significant finding was that administrator's perceptions regarding promotion were significantly higher than found for women faculty. Professional profiles of the female vocational faculty member revealed the following: Over 50% have master's degrees; their mean salary was \$12,907 with a standard deviation of \$3228; over 80% have had work experience outside of education; and on the average, they had been teaching at the community college level for six years. Personal profiles of the female vocational faculty member revealed: Over 67% of those sampled were married; the average number of children per faculty member was two; and their mean age was 41.8 years.

#### Literature Related to Deterrents To Change

##### Sex Discrimination

The recent statutes, as identified by the Project on the Status and Education of Women done by the Association of American Colleges which prohibit discrimination include Executive Order 11246 as amended by 11375, effective October 13, 1968. It prohibits discrimination in employment (including hiring, upgrading, salaries, fringe benefits, training, and other conditions of employment) on the basis of race, color, religion, national origin, or sex. This order covers all employees. The same prohibition of discrimination features are also covered in Title VII of the Civil Rights Act of 1964 as amended by the Equal Employment Opportunity Act of 1972, effective March 24, 1972. Additionally, the Equal Pay Act of 1963 as amended by the Education Amendments of 1972 (Higher Education Act), which became effective July 1, 1972, prohibits discrimination in salaries (including almost all fringe benefits) on the basis of sex (Frank, 1977).

An interesting finding of the Fleming (1974) research was that administrators in the southern region of the Country tend to exhibit a greater degree of discrimination in the ratings of a male applicant over a female applicant for the position of University Center Director for community education development than administrators in other sections of the Country. This may have implications for the paucity of top level women administrators listed in North Carolina higher education.

Research conducted by Helen Kaufman (1961) was based on the hypothesis that, other things being equal, that is, merit, qualifications, and experience, gender is often a decisive factor in the making of appointments to administrative positions in higher education. The purpose of her study was both to identify and analyze policies in the appointment of women to selected administrative positions in higher education and to ascertain the professional status of women graduates in higher education holding degrees in Administration and Supervision from the School of Education at New York University. Data were obtained from questionnaires which were sent to the presidents of 355 colleges and universities for teacher education and to 156 women graduates holding degrees in Administration and Supervision from New York University School of Education from 1938 through 1958.

The principal findings of the investigation were: (1) there were discrepancies between theory and practice regarding the sex factor in the making of administrative appointments; that is, in theory, all respondents agreed that sex should not be a determining factor while in practice, 43.5% of the same respondents felt male

administrators were preferable to female administrators. (2) The percentages of women holding administrative positions in the institutions surveyed were very low; that is, only 4.4% of the selected administrative positions in that study were held by women, only 11.3% of the members of the boards of trustees were women, and only 17.2% of the department heads were women. (3) There is a decided tendency for women to be appointed to administrative positions in "women's areas" only-- for example, home economics, nursing, women's physical education, etc. (4) Experience and education were given top priority in the preparation of women for administrative positions. (5) One of the basic reasons for not appointing women to administrative positions is that there are not enough women qualified for the positions. (6) Education and experience being equal, men fare better professionally than women. In summary, the data from the Kaufman study revealed that while a sex bias does exist, there is a much more complex basis for women not being appointed to administrative positions in higher education.

Although Van Meir (1975) examined studies on sexual discrimination in public school administration opportunities, his candid conclusions appear to be germane to higher education administration also:

The factor of sexual discrimination has played an important role and has been evidenced over a period of time in the selection of candidates for administrative positions. This is apparently an unjustified bias, a bias which will be difficult to correct until the social and cultural expectations of women are modified and an increasingly larger number of women seek administrative credentials and positions. Complicated by the realization that over the past years, women have been discouraged and forced out of the administrative job market, the bias is also likely to continue. Until these factors can be modified, the decreasing trend in the number of female administrators is likely to continue toward the point of zero population.

June M. Marable (1974) found that black women believe that blackness was less a problem than their sex as they sought administrative advancement. The majority indicated a high degree of job satisfaction. In that research project, Marable found that in those schools where women occupied the greater percentage on staffs, men were slowly being groomed for replacement in these positions.

The Women's Bureau, U. S. Department of Labor (1974) identified prevailing myths about women's employment and developed factual statements of reality to refute the myths:

(1) Woman's place is in the home. Homemaking in itself is no longer a full-time job because goods and services formerly produced in the home are now commercially available; laborsaving devices have lightened or eliminated much work around the home. Today, more than half of all women between 18 and 64 years of age are in the labor force, where they are making a substantial contribution to the nation's economy.

(2) Women aren't seriously attached to the labor force; they work only for extra pocket money. Of the nearly 34 million women in the labor force in March, 1973, nearly half were working because of pressing economic need. They were either single, widowed, divorced, or separated or had husbands whose incomes were less than \$3,000 a year. Another 4.7 million had husbands with incomes between \$3,000 and \$7,000.

(3) Women are out ill more than male workers; they cost the company more. A recent Public Health Service study showed little difference in the absentee rate due to illness or injury: 5.6 days a year for women compared with 5.2 for men.

(4) Women don't work as long or as regularly as their male co-workers; their training is costly--and largely wasted. A declining number of women leave work for marriage and children. But even among those who do leave, a majority return when their children are in school. Even with a break in employment, the average woman worker has a worklife expectancy of 25 years as compared with 43 years for the average male worker. The single woman averages 45 years in the labor force.

(5) Married women take jobs away from men; in fact, they ought to quit those jobs they now hold. There were 19.8 million married women (husbands present) in the labor force in March, 1973; the number of unemployed men was 2.5 million. If all the married women stayed at home, and unemployed men were placed in their jobs, there would be 17.3 million unfilled jobs. Moreover, most unemployed men do not have the education or the skill to qualify for many of the jobs held by women, such as secretaries, teachers and nurses.

(6) Women should stick to 'women's jobs' and shouldn't compete for 'men's jobs.' Job requirements, with extremely rare exceptions, are unrelated to sex. Tradition rather than job content has led to labeling certain jobs as women's and other as men's.

(7) Women don't want responsibility on the job; they don't want promotions or job changes which add to their load. Relatively few women have been offered positions of responsibility. But when given these opportunities, women, like men, do cope with job responsibilities in addition to personal and family responsibilities. In 1973, 4.7 million women held professional and technical jobs, another 1.6 million worked as non-farm managers and administrators. Many others held supervisory jobs at all levels in offices and factories.

(8) The employment of mothers leads to juvenile delinquency. Studies show that many factors must be considered when seeking the causes of juvenile delinquency. Whether or not a mother is employed does not appear to be a determining factor. These studies indicate that it is the quality of a mother's care rather than the time consumed in such care that is of major significance.

(9) Men don't like to work for women supervisors. Most men who complain about women supervisors have never worked for a woman. In one study, where at least three-fourths of both the male and female respondents (all executives) had worked with women managers, their evaluation of women in management was favorable. On the other hand, the study showed a traditional/cultural bias among those who reacted unfavorably to women as managers. In another survey in which 41% of the reporting firms indicated that they hired women executives, none rated their performance as unsatisfactory; 50% rated them adequate; 42% rated them the same as their predecessors; and 8% rated them better than their predecessors.

According to Schmuck (1975), there always have been more women than men school teachers since the Civil War but the management of our schools always has been dominated by men. There is a prevailing social norm that



management is a man's job. She believes that women are not administrators because many women do not actively seek administrative jobs and because there are forces in the profession perpetuating a cycle which encourages and supports men and discourages women seeking administrative positions. What is unique about the education field is that women dominate the first step of the career ladder; they are the teachers. In most other professions, men predominate from the very first stage of preparation and practice. Indeed, the scenario of American education consistently portrays women as being effective managers of students and men as being the more appropriate managers of teachers. Although the Schmuck study focused on public school administration, her findings can be adapted to the plight of women educators in colleges and universities. The three predominant deterrents to women seeking administrative positions, as reflected by 40 interviews were: (1) women's traditional role in the family restricts their freedom in careers; (2) women's lack of confidence in their abilities to perform managerial roles deters them from seeking careers in management; and (3) the view that women who do pursue managerial careers are exceptional serves to deter other women from seeking careers in management. When Schmuck (1975) explored the norm about discrimination against the hiring of women administrators, she found that: (1) the predominance of male role models influences women's occupational socialization; (2) women are excluded from the formal and informal socialization processes into the profession; (3) attitudes of administrators toward women's competency affects the selection process; (4) the beliefs about a woman's presence in the management team influences the socialization and selection process; and (5) the forces outside the school system influence the selection of administrators.

In a study which attempted to document covert discrimination, Lawrence Simpson (1968) asked 234 deans, department chairmen, and faculty members at several institutions in Pennsylvania to choose between matched pairs of candidates for some theoretical faculty positions. There were seven pairs--the first of which consisted of two men in order to disguise the nature of the survey. In each of the remaining pairs, a man and a woman were presented as the candidates for a position. In four, the candidates were equally qualified, and in two, the qualifications of the women candidates were markedly superior to those of the men. It was found that when qualifications were equal, the employers usually chose the male candidate, and that when the woman was markedly superior, the employers chose her. The same pattern prevailed for deans, department chairmen, and faculty members. As a result of his findings, Simpson advised:

Prospective academic women must be realistically aware of the employment limitations that may prevail. They should recognize well in advance of their venture into the academic marketplace, that they typically will not be placed on an equal basis with males. Prospective academic women must recognize that they should in effect, be more highly qualified than their male competitors for higher education positions.

He found as well that the resistance to hiring females seemed less in men under age 30 and over age 60 than in those ages in between. The greatest resistance of all came in the men between the ages of 41 and 50.

The study by Palley (1978, pp. 3-9) resulted in very interesting findings which in some ways contradict each other and refute some of the premises of the present study. Her data indicated that once academic women select or are selected for administrative careers, quantitative

opportunities are available to them which seem to be approximately equivalent to those open to men. On the other hand, Palley suggested that if members of religious orders are excluded from the sample, women do not even fare equally with men on a quantitative measure of administrative career achievement. Qualitatively, using a relative traditional indicator of prestige--that is, a major research university is more prestigious than most four-year colleges and two-year colleges--women do not fare as well as men. The sample population for that study of equality of opportunity in higher education administration was drawn from the alumni (1965-1975) of the Academic Administration Internship Program (AAIP) of the American Council on Education. The group of respondents consisted of 168 men and 40 women. The researcher noted that the only factor which may differentiate that population from the average postsecondary administrator is that inasmuch as these individuals were selected for participation in the ACE program by the presidents of their institutions, they had, as a rule, good contacts and relations with academic administrators at the outset of their administrative careers. In that study, 14 men (8.3%) and 4 women (10%) were presidents or chancellors; 24 men (14.3%) and four women (10%) were chief academic officers. The women who were presidents were located at the smaller private and often religious-affiliated institutions.

### Sex Role Stereotypes

Schetlin (1975) observed that many of the educational institutions are still resistive to women, and educational administrators, both men and women, are still functioning largely in terms of myths and stereotypes.

Schetlin further agreed with Cook (1971) that a re-examination of the "centrality of a woman's being a mother and wife" might be stimulated by proposing, because of the insistence on the centrality of that role, that women should be running the government. While the stereotype about sex roles remain, the functions of government are now primarily those that within the home are considered to be women's work, among them: feeding the hungry, managing the budget, caring for the sick and aged, planning for the children's schooling, socializing the young, maintaining order, controlling noise, refereeing disputes, providing transportation, maintaining peer and diplomatic relationships, keeping peace with the neighbors, monitoring cleanliness, preventing disease and accidents, promoting health and safety, maintaining sanitation, disposing of wastes, occupying the unemployed, preserving resources, cleaning up and beautifying the environment.

Literature Related to Strategies  
for Facilitating Change

Role Models

Dr. Nancy Nieboer (1975) attributes the dearth of women administrators to the fact that: (1) there are so few role models for prospective female administrators to emulate, and (2) women wishing to rise to the top level of their professions face the problem of a leadership image which in American society appears to be masculine. The latter idea is supported in Matina Horner's (1972) study where it was pointed out that the qualities associated with top-level administrators and executives are also associated with masculinity, and thus are believed to be inconsistent with femininity. These qualities are competition, independence, competence,

intellectual achievement and leadership. A related finding was obtained by Garda Bowman (1962) in a study of management's image of promotability. She found most of her New York City respondents believed that, while race and nationality should be irrelevant as criteria for promotion, age or sex were considered justifiable grounds for non-promotion.

Nieboer subscribes to the belief that the development of a profile of top-level women administrators in nontraditional positions in coeducational four-year institutions would serve to: (1) tell prospective female administrators what they are up against, what lifestyle has been successful, and what qualities are needed; (2) indicate what the problem areas may be and suggest how to prepare for them, both on an individual basis and with a view to training women to be administrators; (3) act as a role model to help counterbalance negative feedback from society to the woman who enters the "male" area of administration; (4) give counselors a realistic guide in helping the client appraise her strengths in relation to the proposed area of administration. Nieboer boldly suggested that there is a certain kind of woman whose qualifications and personality are such that she will not be deterred from reaching a top-level position in her chosen field. In defense of the development of a profile, she stated that just as Abraham Maslow sought the best possible models (self-actualizers) for his psychology of the healthy, so might women seek the best possible examples of top-level women administrators for their role models in higher education.

### Support Systems

Betty Blaska (1976) proposed that women--faculty, graduate students and undergraduates--in department after department need to sit down together to get to know each other and support each other, to review problems of discrimination, to assess counseling needs of the women and to further the communication channels open to them on a departmental level. The establishment of a structure of "support groups" in each academic department would operate to assist women in a myriad of ways. Formal objectives of support groups would be: (1) to instigate dialogue among all levels of women; (2) to encourage student-faculty contacts; (3) to raise the levels of self-confidence and independence of women; (4) to deal with home-career conflicts, doubts and ambivalences; (5) to provide counseling and support on an immediate and professional commitment; (7) to set role models and professional examples for women at earlier stages of their vocational development; (8) to encourage faculty support of each other's professional activities; (9) to assist women in learning the necessary skills or knowledge needed for successful academic or professional careers, such as assertiveness, developing papers for publication, writing grants and business management; and (10) to act as women's advocates in cases of discrimination, grievance or prejudice.

TenElshof and Searle (1974) add to this thought-provoking list of objectives: (1) to increase awareness of the contribution women have made and are making; (2) to explore options available to today's women outside the traditional female roles; (3) to build a sense of community and identity between women; and (4) to keep women informed on

the current issues as a basis for action. These researchers espouse the firm belief that only when women unite together for their common good can they grow and succeed within the academic world (Blaska, 1976, pp. 173-177).

Dickerson (1974), interestingly enough, refers to the "climate of unexpectation." In expecting less of women students, faculty enact a self-fulfilling prophecy whereby women students do in fact achieve less. Forty-seven percent of the women in her sample said they did not feel that the faculty and administration expect as much of them as would be expected of a male with similar training. Seventy-one percent felt that women have not been encouraged to have as strong vocational aspirations and commitment as have men.

Findings of Roby (1972) have shown that women need special support and encouragement to perform intellectually and professionally. They need to see women in roles other than housewife-mother to know that other roles are possible for them. The absence of women in faculty and administrative positions serves as a silent but potent message to female students that aiming high would be foolish indeed (Roby, 1972).

Blaska (1976) cited an interesting circumstance that suggests that women have themselves not been supportive of fledgling women professionals. Referred to as the "Queen Bees," those women faculty who had over-identified with men held a double standard of performance. They seemed to have assumed themselves to be exceptions to the rule that only men succeed and they have been unsympathetic, even hostile, toward women students. According to Berry and Kushner (1975), the proverbial Queen

Bee has been engaged in a lifelong struggle to gain success. She has fought the denigrating attitudes of both men and women. Hence she is more concerned with her own independence than with group strategies. However, a countervailing trend is noted. As a result of raised consciousness, identification with other women rather than with male colleagues, a higher self-esteem and esteem for other women, they have ceased to be hostile to each other (Safilios-Rothschild, 1974).

Women are talking to each other, helping each other, inviting one another to symposia and conferences, including each other in research. They are beginning to "sponsor" women students and to support them in their efforts to gain a professional career the way male professionals have always sponsored male students.

Goerss (1977) found that researchers investigating the attitudes which prevent women from seeking or obtaining administrative positions have used several designs. A study of teachers and principals reported that women teachers were more favorable than men teachers about teaching under a woman principal; male and female teachers with the least or the most experience and male teachers with experience teaching with female principals were more favorable toward women holding elementary school principalships (Barter, 1959). In this interesting study which included school board personnel and superintendents, 45.8% of the women but only 10.5% of the men disagreed with the statement that men are better suited for administrative jobs. A majority of men agreed that men prefer to work under a man, but the majority of women disagreed. The majority of both men and women felt a male applicant for superintendent would be hired even



if an equally qualified woman applied. The same percentage of men and women aspired for leadership positions, but the majority of women felt they would be discriminated against when applying for such positions. Men also indicated they had received more encouragement in pursuing administrative careers. Specifically, 50% of the men but only 13.8% of the women received such encouragement from university advisers (Matheny, 1973).

Lloyd-Jones (1973) carefully examined the popular myths which have historically relegated women to secondary positions of influence. With changing roles, relationships and lifestyles, she believes that the current value system will have to be altered to change the self concepts of girls and women. Lloyd-Jones suggested that in administration it is vitally important to use work to help people grow as well as using people to get work done.

#### Old-Girl System

Fley (1974) highly recommended the development of a strong national and local informal system for securing administrative positions. The institution of an "old girl" system would complement or combat the successful "old boy" system and should stretch into all disciplines, administrative and personnel specialties. Other steps toward improvement of opportunities for women would include monitoring selection committees as they move from the opening of a position to the final selection; communicating nominations and information secured from monitoring selection committee operations. Additionally, women need to be directed to career possibilities in agencies dealing with higher education but not a part of it, i. e., foundations, accrediting agencies,

state and regional coordinating boards, professional organizations, private corporations engaged in testing, research and publication. Women students nearing graduation and seeking jobs need to be cautioned about one-year and nontenured jobs which allow institutions to improve their statistics quickly without making a long-term commitment to the person. Finally, Fley suggested that candidates who secure positions should notify all those people who assisted them. This is not only a courtesy but it provides feedback as it establishes in the candidates' minds knowledge of how the system works and who is active in it as well as putting them in a uniquely strong position to help other women candidates.

Gordon and Bell (1977) clearly indicated that in the realm of securing administrative jobs, competence obviously is not enough. The "old boy" network has always existed to teach those all-important informal ropes of the profession to chosen male protégés: the introductions to professional colleagues, the personal recommendations for fellowships, and the intervention for top job opportunities.

Bernice Sandler (1974) suggests that men very often are uncomfortable with female students; hence, they seldom become protégés. Conversely, Judy Long-Laws (1976) espouses the theory that most women who have made it into administration have had male mentoring and male colleagues who served to provide those opportunities generally reserved for male protégés.

### Tactics

Harragan (1977) attributes the failure of women to be upwardly

mobile in the area of administration to the absence of exposure to lessons to be learned from participation in athletic and military activities or games. Games challenge the imagination, the wits, the physical dexterity of their participants. They relieve tension and bottled-up anxieties and fears. Serious games, silly games, indoor games, ball games, board games, card games, any games absorb people and provide a stimulating excitement to new learning experiences. Games are immensely challenging to expanding personalities, and one reason many women are immobilized at some pre-pubertal point of personal growth is that they were never taught to play the rough-and-tumble, competitive, active, spirited games that develop confidence, lead to positive self-appraisal, and create a healthy respect for winning. In order to correct the faults of the past, the strategy of women should be the examination of the strategies of gamesmanship. Their potential as players staggers the imagination. Woman can't change a game until she can play by the rules that exist. She can't develop a useful strategy or capitalize on a skill until she knows what she is up against. Woman can't calculate her moves until she is knowledgeable enough to predict countermoves and defensive tactics of rival teams. Woman can't be part of a winning team until she knows what a team is, what cooperation entails, what position she can play best, and what she can expect of other teammates. Woman can't practice skills unless she knows what skills are important. She can't play a game if she approaches it like an unpleasant chore (Harragan, 1977).

When Betty Harragan (1977) wrote about corporate gamesmanship for women, she revealed the specific, unwritten rules for playing, judging and winning the power game. She identified the traditional feminine attitudes that can handicap, confuse and discourage women as they cope with daily challenges. She taught the language men use for women to know what they mean and to show women how to put their points across. Her basic premise is that women suffer as administrators because our society has shielded girls from the experiences boys have in team sports and military orientation--the two sources of the design of the pyramidal hierarchy and the basic concept of group effort.

The McCorkle (1974) study found the advice given to women wishing to go into higher education administration was: to get academic credentials and experience in a professional field; to study theory of administration, higher education, negotiation, law, research techniques and how to work with people; to retain your identity and belief in yourself as a woman; to accept challenge, work hard and have high standards; if you marry, to marry a man who sees you as an individual.

### Attaining Positions

Jacobs (1975) identified a phenomenon which influenced the administrative opportunities for women:

For years, women had floated in teaching and counseling jobs, sure of their talents but without real direction. Only the manifest destiny of history which presented them with World War II and the exit of all the males to the front allowed women an opportunity to move 'up the back staircase' to head a school. The back staircase of education is a secondary route based on enormous luck and extraordinary circumstances. This is the passage hundreds of talented females of all ages have to rely on

in order to achieve high administrative posts. What about the front staircase? When a skilled woman today tries to ascend the supervisory hierarchy through primary channels, she finds her path is blocked by men.

### Competitiveness

Dael Wolfe (1954) has summarized some of the earlier studies of competitiveness, or rather noncompetitiveness, in working women, and concludes:

Taken at their face value, these studies point clearly to the conclusion that the typical goal of an employed woman is not promotion and advancement in her chosen field. The strongest wish is for marriage and a home. When that wish cannot be realized, continuation in the same or a similar job is a more frequent goal than is promotion. The typical employed woman, in short, is not wholeheartedly in competition with the employed man.

Wolfe warned against taking the results at face value and suggested that perhaps the noncompetitiveness of women may be a defensive reaction against sex discrimination. The researcher of the present study applauds that author's explanation of the possible reason for non-competitiveness found more than two decades prior to this study. Doubtless that attitude prevailed when women were discouraged by the prospects of overcoming sex discrimination, but hopefully the picture will continue to change in a positive direction.

### Analysis of the State of the Reviewed Literature

#### Showing Relationship to the Present Study

Although a reasonable amount of research and writing has been directed toward women faculty members in higher education and principals of schools, there is a paucity of research on women administrators in

colleges and universities on the basis of the problems encountered by them. It is encouraging to note the emergence of interest in this area as reflected by the various studies and books which have been cited in this review of literature.

The researcher approached this review by subdividing the literature according to the effect on the conditions of women administrators. The current status of women was examined along the lines which were the focal points of the present study. Because of the obvious need to improve the inclusion of women in the administrative structure of higher education, there was an examination of the features which tend to work against expansion. In recognition of the need for a plan of action, some strategies and tactics for facilitating positive change were identified among the available literature.

The present research followed the interest of the Florence Stevenson (1973) study by including questions about the age ranges of the women administrators and their children. Additionally, the reasons for lack of advancement tended to follow the pattern of sheer discrimination, lack of assertiveness, and absence of support systems in the present study just as they were reflected in reviewed literature.

Ideas about the influence of birth order, marital status and personality characteristics seemed to be a continuing thread throughout the studies that were reviewed. In many studies, it was found that women tended to become administrators between the ages of 25 and 35. The present study sought this information also.

With an interest in job satisfaction, the researcher for the present study made an inquiry and found a very high degree of job satisfaction among the respondents.

Another area for which the present study showed concern was the origin of the career choice. Like Reeves (1975), it was found that many of the women administrators were inspired by a male.

In Hennig's (1977) study, the administrators were unmarried until they reached the approximate age of 35.

Norman (1970) found women in leadership positions in North Carolina to be abstract in their thinking and to possess higher scholastic capacity than 91.8 of the general population. According to the present study, these women were also found to be of high intelligence, confident, sufficient, uninhibited and to possess an intellectual approach to a situation.

Just as Arter (1972) found the woman administrator to hold academic rank below the level of professor with a salary below \$20,000, so did the present study.

The findings of the present study support the results of the Oltman (1971) study in that the women administrators' involvement in policy making in higher education is conspicuously lacking while their duties tend to require skills and attention to detail.

The Patrick (1975) study concentrated on Need achievement--one of the questions in the present study--and found that professional women are motivated to achieve for the sake of pride in competence. The present study did not assess the reasons for achievement, but it did find that the respondents recognize and respect Need achievement.

Intense concentration on the research which has been done on women administrators throughout America motivated this examination of the social characteristics and career patterns of women administrators in the four-year colleges and universities of North Carolina.

CHAPTER III  
RESEARCH DESIGN AND METHODOLOGY

Statement of the Problem

The purpose of this study was to identify the major variables believed to be instrumental in influencing the positions, academic ranks and salaries of women administrators in North Carolina colleges and universities. The variables found to be influential included (a) professional work experience background, (b) duties of the position, (c) biographical background, (d) educational background, and (e) attitudes toward the sex culture of America. The study measured the extent to which components of these selected factors affect the status of women administrators in North Carolina higher education as perceived by the women administrators themselves.

The multi-faceted problem of the present study focused on whether a relationship existed between position, academic rank, salary and the (a) professional work experience, (b) duties, (c) biographical background, (d) educational background and (e) attitudes toward the American sex culture.

These essential questions were answered by the study in regard to women administrators in North Carolina four-year colleges and universities:

1. Is there a relationship between position and (a) professional work experience, (b) duties, (c) biographical background,



- (d) educational background, and (e) attitudes toward the American sex culture?
2. Is there a relationship between academic rank and (a) professional work experience, (b) duties, (c) biographical background, (d) educational background, and (e) attitudes toward the American sex culture?
  3. Is there a relationship between salary and (a) professional work experience, (b) duties, (c) biographical background, (d) educational background and (e) attitudes toward the American sex culture?

The responses of women administrators, generated by the information request and the interviews, either supported or refuted claims of popular constraints or barriers to advancement by women. Some of these alleged barriers include chauvenism, stereotypes, labels, culturally-defined roles, liabilities associated with childbearing and child rearing, late-life entry to administrative positions, "old-boy" network, lack of aggressiveness, difficulty in understanding quantitative matters, cultural prejudices and sexism.

#### Definition of Key Terms

Women Administrators--Women employed in any one of the identified positions in institutions of higher education and who spend one-half or more of their time in general administrative positions.

Social Characteristics--Qualities that distinguish or identify a community or class of persons from other classes.

"Old-Boy Network"--Custom which men follow to nominate or recommend other men for positions based on personal contact.

Career Pattern--Progression of jobs leading to the highest administrative position.

Information Request--The questionnaire used to collect data.

#### Scope of the Study

The study was limited to the State of North Carolina.

The data were collected during March, April and May of 1979.

The study was restricted to the public and nonpublic four-year colleges and universities in North Carolina (See Appendix C).

The study included all of the approximately 343 women administrators in North Carolina senior colleges and universities whose positions ranked above the hierarchical level of academic department chairperson, as identified in the Educational Directory, 1978-1979 and Education Directory, Colleges and Universities 1977-78, the respective catalogs of the institutions listed in the North Carolina 1978-1979 Education Directory, and from the researcher's personal knowledge.

The study focused on career patterns of women administrators and key factors which affect them significantly, that is, professional work experience background, duties of the positions, biographical background, educational background and attitudes toward the sex culture of America.

#### Research Hypotheses

The present study sought to identify patterns which existed for the group of administrators as a whole in the points which follow, and which

differences existed in the patterns between the two position categories of women administrators in this study. The following beliefs were pertinent to this study:

1. Women administrators in North Carolina higher education consider themselves to be discriminated against and impeded in their careers.
2. Key factors which facilitate or aid advancement in career patterns for women administrators in North Carolina higher education include (a) an early life plan to be an administrator, (b) acquisition of educational credentials and experiences, (c) a reasonable degree of permanence at each institution, (d) need achievement with definite career aspirations, and (e) the attitudes and skills to conquer a sex culture which discriminates.
4. Intensity of aspirations for advancement in career patterns for women administrators in North Carolina higher education is inversely related to their academic rank.
5. There are significant differences in life styles, career patterns and attitudes toward the American sex culture represented among women administrators in North Carolina higher education.
6. In North Carolina higher education, there are more women administrators in Category II than in Category I as designated in this study.

Assumptions

1. Women administrators in North Carolina higher education are discriminated against and impeded in their careers.
2. Impediments, barriers, or constraints for women administrators in higher education arise from several factors, including, among others, cultural prejudices, culturally-defined roles for women, stereotypes and sexism.
3. Women administrators in higher education themselves are best qualified to provide insights on their possible career patterns.
4. Professional work experience background, biographical background, educational background, duties of the position, and attitudes toward the sex culture of America are key factors associated with the social characteristics and career patterns of women administrators in higher education.
5. Participation in a study on social characteristics and career patterns of women administrators in higher education will sharpen the consciousness of these women administrators and deepen their awareness of their circumstance.
6. Implications for the preparation of future women administrators for North Carolina colleges and universities have been identified.
7. By hiring, providing support systems and promoting women administrators in higher education, the students, faculty, administrative members of the universities, the taxpayers and contributors at large would receive the benefits to be derived from the maximum utilization of available human resources.

### Methods and Procedures

This study was designed to identify the social characteristics and career patterns of women administrators in North Carolina senior colleges and universities, and to interpret opinions held by these administrators concerning circumstances operating to affect their current status and future role in administration.

The methodological steps involved in this study were:

1. An information request was developed as a means of investigation to elicit facts and opinions from the survey population.
2. Interviews were conducted with ten women administrators to have their discussions serve as a corroborative medium to supplement the data secured from the information request.
3. The information request, along with appropriate instructions for completing and procedures for returning, was distributed to the 343 women administrators who had been identified.
4. Follow-up letters were then mailed one month later to persons who did not respond initially.
5. Data from survey returns were put on the appropriate forms for statistical computation by computer.
6. An analysis of the data was made with the technical assistance of the University of North Carolina at Greensboro Computer Center personnel.

### Sources of Data

The principal data for this study were gathered from:

1. Information request form used in the survey
2. Personal interviews
3. Professional literature in the field of higher education administration
4. Professional literature on women in the world of work, particularly in education
5. Related literature concerning women in general in the labor force, particularly in education

In addition to the basic survey data secured via the information request, this study also included biographical and personal-documentary materials secured from interviews of ten women administrators. The information secured from those interviewed included additional insights and ideas thus supplementing the objectively-procured data, and it served as a corroborative medium. An average period of thirty minutes was spent with the women administrators. The interviews were flexible in style, and were guided by a general list of topics to be discussed rather than by a rigid interview guide with categorical questions. This made it possible to discuss issues that the women themselves brought up, in addition to those which had been thought of prior to the interview. This is also what made it possible to go beyond the brief check-list answers which so many surveys rely on, and thus find out in more detail the opinions of the women administrators as they reflected on their positions and the related circumstance.

#### Construction and Testing of the Instrument

Since no existing instrument adequately represented the data needed for this study, one had to be designed by the researcher to elicit

pertinent information (see Appendix B). A complete delineation of information secured from the women administrators in the study was reflected in the instrument which was designed specifically for collecting such information.

The information request was designed and then reviewed by a panel of five university women administrators for pretesting (see Appendix B). This panel scrutinized and evaluated the information request items. The panel was asked to estimate the amount of time required to complete the information request and to comment on the clarity of each question.

In addition to the pretesting by the panel of women administrators, the information request was also reviewed by a programming expert for readability, style, form, ease of coding and computer analysis. On the basis of the pretesting and expert evaluation, minor revisions were made to refine the instrument and the final form of the information request was developed and printed.

The quality of the paper used in the information request was carefully chosen because it was opaque. This feature was important because it was printed on both sides in order to reduce the weight of the packet for mailing. The paper was tested to insure that it would take ink and that the markings from ballpoint pens would not penetrate or smear. A light green paper was selected because of the increased readability, attractiveness and to distinguish the form from the other items in the packet. It was also believed that the green color would be easily distinguishable from other business papers on the desks of the women administrators and would be likely to elicit a response.

In preparing details for distribution of the information requests, the researcher followed some of the advice given by Warwick and Lininger (1975):

In North America, one of the most effective devices seems to be stamped, addressed, return envelopes, rather than a conventional business reply envelope or none at all. Higher returns have also been noted when questionnaires are sent out by first-class rather than third-class mail. In one study, respondents seemed to react favorably when multicolored, small-denomination stamps were placed on the envelope, and when the packet included a personally typed letter. Other useful techniques include follow-up phone calls, suggested deadline dates, green questionnaires rather than white, and postcards sent as reminders. The general conclusions are that: (1) the greater the amount of work required of the respondent--such as the need to search for an envelope, the lower the response rate; (2) some type of 'personal touch' may be helpful, whether in the form of a supporting phone call, the use of first-class mail, unusual stamps, or an introductory letter; and (3) the greater the intrinsic interest of the subject matter to the respondents, or the greater the links between the researcher and the respondents, the better the chances of a high response rate.

On March 9, a letter of transmittal and the instrument were mailed to 343 women administrators (see Appendix B). The letter bore an individualized, typewritten inside address and salutation. The letterhead of the School of Education of the University of North Carolina at Greensboro was used, and the letter bore the signatures of the researcher and the Chairman of the Doctoral Advisory Committee. Additionally, a large 6" x 9" Kraft envelope which had been self addressed and stamped was enclosed for the response.

A reminder letter was mailed to one hundred twenty-one non-respondents on April 9, 1979 (see Appendix B).



### The Sample

The study involved a sample population consisting of all of the approximately 343 women administrators in North Carolina senior colleges and universities whose positions ranked above the hierarchical level of academic department chairperson. The four-year public and private higher education institutions for the study were identified in the North Carolina Education Directory 1978-1979. The women administrators were identified in the Education Directory, Colleges and Universities 1977-78, in the respective catalogues of the institutions and from the researcher's personal knowledge.

The taxonomy of administrative positions was developed by use of a combination of sources. Gardner (1966), in a doctoral dissertation on women administrators in higher education, developed a list of positions existing at that time. Ruth Oltman's (1970) survey which was replicated by the Carnegie Commission in its study (1973) on opportunities for women in higher education provided the basic list of positions held by women administrators in four-year colleges and universities. The Education Directory, Colleges and Universities 1977-78, published by the U. S. Department of Health, Education, and Welfare, and the college catalogues presented updated titles for some of the positions and they listed positions which have been developed more recently than the Gardner (1966), the Oltman (1970) and the Carnegie Commission (1973) studies.

The women administrators were designated as being employed in any of the listed positions--or similarly identified ones--and spending one-half or more of their time in general administrative positions (see Appendix A). The break-down of positions held by the respondents, which was shown in Table 1, indicates that there was only a slight difference between public and private institutions in either category. Twenty-four percent (58) of the total group of 245 respondents were in Category I in public institutions. Twenty percent (49) of the total population of respondents were in Category I in private institutions. In Category II, 26% (64) were in public institutions, and 30% (74) were in private institutions.

The women administrators in the study were grouped in two categories according to the usual hierarchical levels of academic administration for higher education. They were designated as being employed in any of the positions--or similarly identified ones--and spending one-half or more of their time in general administrative positions (see Appendix A). Category I was the designation given all positions of presidents and their assistants; vice presidents and their assistants; deans and associate deans; and business managers. Category II was the designation given all positions of directors, head librarian and others per se. Table 1 shows the identification of the two categories of positions according to the financial support of the institutions.

Table 1

## Frequencies of Responses on Present Positions Held

| Position  | Institution |         | Frequency | Percentage |
|---|-------------|---------|-----------|------------|
|   | Public      | Private |           |            |
| Category I  |             |         |           |            |
| President, Chancellor                                   | 0           | 1       | 1         | 0.4        |
| Assistant to President, Chancellor                      | 6           | 1       | 7         | 2.9        |
| Administrative Assistant to President, Chancellor       | 0           | 5       | 5         | 2.0        |
| Vice President, Vice Chancellor                         | 3           | 4       | 7         | 2.9        |
| Assistant Vice President, Assistant Vice Chancellor     | 6           | 2       | 8         | 3.3        |
| Assistant to Vice President, Assist. to V. Chancellor   | 6           | 2       | 8         | 3.3        |
| Dean of Institutional Research                          | 2           | 1       | 3         | 1.2        |
| Dean of a College                                       | 6           | 6       | 12        | 4.9        |
| Dean of Nursing, Home Economics, Health, Phys.Ed., Etc. | 13          | 3       | 16        | 6.5        |
| Dean of Students--Dev., Services, Org., Activities      | 10          | 7       | 17        | 6.9        |
| Associate Dean of Students                              | 4           | 7       | 11        | 4.5        |
| Dean of Women   | 2           | 7       | 9         | 3.7        |
| Business Manager  | 0           | 3       | 3         | 1.2        |
| Sub-total, Category I                                   | 58          | 49      | 107       |            |
| Category II   |             |         |           |            |
| Director of Admissions, Registration, Records           | 9           | 9       | 18        | 7.3        |
| Director of Alumnae (i) Affairs                         | 4           | 6       | 10        | 4.1        |
| Director of Career Planning                             | 1           | 5       | 6         | 2.4        |
| Director of Continuing Education                        | 1           | 3       | 4         | 1.6        |
| Director of Counseling                                  | 1           | 3       | 4         | 1.6        |
| Director of Data Processing                             | 0           | 3       | 3         | 1.2        |
| Director of Financial Aid                               | 6           | 5       | 11        | 4.5        |
| Director of Personnel                                   | 5           | 0       | 5         | 2.0        |
| Director of Placement                                   | 1           | 1       | 2         | 0.8        |
| Director of Public Information, Relations               | 2           | 1       | 3         | 1.2        |

Table 1 (Continued)

| Position                     | Institution |          | Frequency | Percentage |
|------------------------------|-------------|----------|-----------|------------|
|                              | Public      | Private  |           |            |
| Category II, continued       |             |          |           |            |
| Director of Special Services | 1           | 0        | 1         | 0.4        |
| Director of Student Teaching | 0           | 1        | 1         | 0.4        |
| Director of Summer School    | 1           | 0        | 1         | 0.4        |
| Head Librarian               | 4           | 12       | 16        | 6.5        |
| Other                        | 27          | 25       | 52        | 21.2       |
| No Response                  | <u>1</u>    | <u>0</u> | <u>1</u>  | <u>0.4</u> |
| Sub-total, Category II       | 64          | 74       | 138       |            |
| Grand Totals                 | 122         | 123      | 245       | 100.0      |

The computed chi-square statistics for the relationship between academic rank and position, 17.49; and salaries, 85.29, were significant at the .05 level, as shown in Table 2. This table also showed that the largest percentage of the respondents held no academic rank; however, among those respondents holding academic rank, the frequency reflected a favorable picture since the percentage of professors is highest with subsequent academic ranks falling in descending order.

Table 2  
Frequencies of Responses on Academic Rank Held

| Academic Rank    | Frequency | Percentage  | Position*  |             | Salary Category* |                   |
|------------------|-----------|-------------|------------|-------------|------------------|-------------------|
|                  |           |             | Category I | Category II | Below \$23,000   | \$23,000 or Above |
| Professor        | 35        | 13.3        | 24         | 11          | 4                | 31                |
| Assoc. Professor | 27        | 11.0        | 13         | 14          | 14               | 13                |
| Assist. Prof.    | 27        | 11.0        | 15         | 12          | 18               | 9                 |
| Instructor       | 18        | 7.3         | 8          | 10          | 17               | 1                 |
| Lecturer         | 4         | 1.6         | 0          | 4           | 4                | 0                 |
| No Academic Rank | 90        | 36.8        | 19         | 71          | 83               | 7                 |
| No Response      | <u>44</u> | <u>18.0</u> | <u>26</u>  | <u>18</u>   | <u>26</u>        | <u>18</u>         |
| Total            | 245       | 100.0       | 105        | 140         | 166              | 79                |

\* Positions-Chi Square = 17.49; df. 6; significant at .05 level  
 \*Salaries--Chi Square = 85.29; df. 6; significant at .05 level

The salaries received, as reflected in Table 3, ranged from \$8,000 to more than \$42,000, with the median salary being \$17,913. Only four persons received salaries above \$42,000.

Table 3  
Frequencies of Responses on Salaries Received

| Salary Range        | Frequency | Percentage |
|---------------------|-----------|------------|
| Less than \$ 8,000  | 0         | 0.0        |
| \$ 8,000 - \$12,000 | 37        | 15.1       |
| \$13,000 - \$17,000 | 87        | 35.5       |
| \$18,000 - \$22,000 | 52        | 21.2       |
| \$23,000 - \$27,000 | 33        | 13.5       |
| \$28,000 - \$32,000 | 22        | 9.0        |
| \$33,000 - \$37,000 | 6         | 2.4        |
| \$38,000 - \$42,000 | 3         | 1.2        |
| More than \$42,000  | 4         | 1.6        |
| No Response         | <u>1</u>  | <u>0.4</u> |
| Total               | 245       | 100.0      |

Median Salary: \$17,913

According to Table 4, the median age of the respondents was 48. It was interesting to note that within the group, four of the respondents were below age 25 and four were above age 65. The largest number (78) fell in the age range 45-54.

Table 4  
Frequencies of Response on Age Ranges

| Age Range   | Frequency | Percentage |
|-------------|-----------|------------|
| 24 or less  | 4         | 1.6        |
| 25-34       | 51        | 20.8       |
| 35-44       | 62        | 25.3       |
| 45-54       | 78        | 31.8       |
| 55-64       | 41        | 16.7       |
| 65 or older | 4         | 1.6        |
| No Response | <u>5</u>  | <u>2.0</u> |
| Total       | 245       | 100.0      |

Median: 48

The educational degrees held by the respondents were presented in Table 5. Table 6 showed the highest degrees earned. Three persons were registered nurses, three were medical doctors, and three held honorary doctorates. The women with master's degrees numbered 108, and there were 69 (28.2%) holding the doctorate.

The college courses and experiences believed to be most helpful in preparing for administrative duties were listed by the respondents. Table 7 revealed that on-the-job training had the greatest effect in both methods of registering responses. For those who checked their responses and for those who ranked them, the most pertinent source of assistance was on-the-job training--44 (28%) and 65 (38%) respectively.

Table 5  
Frequencies of Responses on Educational Degrees Attained

| Degrees            | Frequency | Percentage |
|--------------------|-----------|------------|
| None               | 1         | 0.2        |
| Associate          | 15        | 2.9        |
| Registered Nurse   | 3         | 0.6        |
| Bachelor's         | 238       | 46.7       |
| Master's           | 175       | 34.3       |
| Honorary Doctorate | 3         | 0.6        |
| Doctorate          | 72        | 14.1       |
| Medical Doctorate  | <u>3</u>  | <u>0.6</u> |
| Total              | 510       | 100.0      |



Table 6

## Frequencies of Responses on Highest Educational Degree Earned

| Degrees           | Frequency | Percentage |
|-------------------|-----------|------------|
| None              | 1         | 0.4        |
| Associate         | 5         | 2.0        |
| Bachelor's        | 57        | 23.3       |
| Master's          | 108       | 44.1       |
| Doctorate         | 69        | 28.2       |
| Medical Doctorate | 3         | 1.2        |
| No Response       | <u>2</u>  | <u>0.8</u> |
| Total             | 245       | 100.0      |

Table 7

Frequencies of Responses on College Courses and Experiences Believed  
To Enhance Preparation for Administrative Duties

| Course<br>or<br>Experience | Checked,<br>Not<br>Ranked | Ranked |    |    |    |    |   |   |   |   |
|----------------------------|---------------------------|--------|----|----|----|----|---|---|---|---|
|                            |                           | 1      | 2  | 3  | 4  | 5  | 6 | 7 | 8 | 9 |
| Business                   | 15                        | 19     | 8  | 6  | 4  | 3  | 1 | 3 | 1 | 0 |
| Sociology                  | 8                         | 2      | 6  | 12 | 6  | 5  | 4 | 4 | 3 | 1 |
| Psychology                 | 19                        | 10     | 22 | 25 | 17 | 8  | 4 | 1 | 1 | 0 |
| Education                  | 15                        | 18     | 17 | 12 | 15 | 12 | 4 | 3 | 1 | 1 |
| Fine Arts                  | 2                         | 3      | 5  | 3  | 3  | 0  | 3 | 2 | 1 | 2 |
| Law                        | 3                         | 2      | 1  | 2  | 2  | 1  | 3 | 1 | 0 | 2 |
| Administration             | 13                        | 19     | 18 | 12 | 11 | 8  | 3 | 0 | 0 | 1 |
| Management                 | 20                        | 8      | 17 | 22 | 9  | 5  | 8 | 3 | 1 | 2 |
| Personnel Management       | 6                         | 4      | 10 | 8  | 7  | 5  | 2 | 3 | 4 | 0 |
| Leadership Seminars        | 18                        | 2      | 15 | 11 | 13 | 14 | 4 | 2 | 2 | 1 |
| On-The-Job Training        | 44                        | 65     | 21 | 16 | 13 | 5  | 2 | 2 | 0 | 1 |
| Community Volunteer        | 9                         | 5      | 7  | 2  | 8  | 4  | 3 | 4 | 1 | 2 |
| Other                      | 15                        | 11     | 8  | 6  | 3  | 6  | 1 | 1 | 0 | 0 |

Ninety-one percent (41) of the 45 institutions in the study were coeducational. Nine percent (4) enroll women only. Thirty-six percent of the institutions in the study were public. Of the twenty-nine non-public four-year institutions, 93% (27) represented a religious affiliation, and 7% (2) were independent, non-profit.

Of the institutions denoting a religious affiliation, eleven denominations were represented. Churches included in the population were Presbyterian (22%); Methodist (22%); Baptist (18%); Catholic (7%); United Church of Christ (7%); Moravian (4%); Friends (4%); Episcopal (4%); Lutheran (4%); Christian Church (4%); and AME Zion (4%). A list of the participating institutions is provided in Appendix C.

These institutions were identified in the North Carolina Education Directory 1978-1979. The women administrators were identified in the Education Directory, Colleges and Universities 1977-78, in the respective catalogues of the institutions and from the researcher's personal knowledge.

Because the researcher for the present study had an abiding interest in the preparation of prospective administrators, the subjects were asked to give advice on preparation of prospective administrators. Table 8 showed that the acquisition of academic credentials and experience was highest among the priorities of the respondents. New administrators were advised to work hard and learn to work with people. Focus on being assertive was also supported.

Table 8  
 Frequencies of Responses on Advice to  
 Prospective Women Administrators

| Advice   | Checked,<br>Not<br>Ranked | Ranked   |          |          |          |          |          |
|--|---------------------------|----------|----------|----------|----------|----------|----------|
|  |                           | 1        | 2        | 3        | 4        | 5        | 6        |
| Acquire academic credentials<br>and experience | 184                       | 21       | 6        | 1        | 0        | 0        | 0        |
| Work hard and learn to work<br>with people     | 135                       | 6        | 12       | 6        | 2        | 0        | 0        |
| Study negotiation, law, etc.                   | 46                        | 0        | 4        | 5        | 5        | 0        | 0        |
| Be Assertive                                   | 105                       | 2        | 6        | 9        | 5        | 1        | 0        |
| Other  | <u>31</u>                 | <u>3</u> | <u>0</u> | <u>0</u> | <u>1</u> | <u>0</u> | <u>0</u> |
| Total  | 500                       | 32       | 28       | 21       | 13       | 1        | 0        |

Interestingly, among the women who were interviewed, the following advice was registered:

1. Don't be afraid to 'blow your own horn' and do your public relations work--no one else will.
2. Keep your sense of humor.
3. You must exude self-confidence--if you aren't confident of your ability, they won't be either, and you probably won't get the job.
4. Be sure your home responsibilities are in order and organized in order to minimize conflicts with work.
5. Publish, do research, give programs at professional meetings, run for office in professional organizations.
6. Learn to give credit to others for achievement.
7. Become active in the support system.
8. Know someone who is 'willing to take a chance on a woman.'
9. Learn to play golf--that's where decisions are made.
10. Overcome inferior feelings; learn to verbalize with older men administrators; participate in decision\_making and assertiveness training.
11. Clarify objectives within your position and learn to preserve your ethical standards. Also avoid being abrasive.
12. Learn all you can about the power structure.
13. Be prepared, available, flexible, honest, fair and self-assured--then proceed full speed ahead to happy success.
14. Publish, visit campuses, seek out possible vacancies.
15. Develop immunity to ulcers.
16. Be assertive--with limitation. Assertive must be defined. Become an independent and autonomous person if possible. Run for public office at least once. Identify early people who can and will help you. Get to know as many administrators as possible. Identify yourself with a political party and work for it.

17. You need credentials and experience, but you need love and enthusiasm for people and for your work.

18. Don't get so intensely involved in the female issue that it obscures your work as a professional--either yourself or that perceived by others. In my opinion, women more than any other group, are killing themselves off this way. Issues often seem to be made where none may exist.

19. Plan on a long-range basis. Be yourself.

20. I disagree with many writers who seemingly say that a woman's dress has to be somewhat masculine. I think that if a woman is able to maintain her femininity and have good management skills along with the ability to effectively communicate with others, she will be able to meet with a great deal of success.

21. Be prepared for terrible discrimination. Become acquainted with a good lawyer who is sympathetic to women's problems in advance.

#### Data Collection and Analysis

The instrument was mailed to all of the identified 343 women administrators who were employed above the level of academic department chairperson, in the forty-five four-year colleges and universities of North Carolina on March 9, 1979. The letter of transmittal indicated a desire for immediate response, but a deadline date was avoided because it was believed that late responses would be discouraged after the arrival of a deadline date (see Appendix B). The information requests were keyed to facilitate the sending of follow-up letters to those not responding initially, but there was complete protection of the anonymity of the subjects in the treatment of the data.

In designating the usual response rate, Erdos and Morgan (1970) indicated that of 116 surveys, with more than two 8½ x 11 page questionnaires, 29% achieved a 50% or better response after one mailing; 55% achieved a 50% to 59% or better response after one mailing; 10%

achieved a 60% to 69%; and 6% achieved a 70% or better response after one mailing. The median response rate of 116 surveys with more than two 8½ x 11 page questionnaires was 54%. Those researchers noted that despite the best efforts of the research man, the longer questionnaires will in general not obtain as high a response rate as the short ones. The information request in this present study was, by necessity, relatively detailed and long, resulting in a nine-page instrument; however, there was a 78% response rate after one mailing and a follow-up reminder letter.

According to Warwick and Lininger (1975), completion rates on many mail questionnaires are notoriously low, with figures of 40% or 50% being considered good. By contrast, a response rate of 75%, achieved only rarely and under optimal conditions with a mail questionnaire, is often the minimal acceptable level in surveys using household or telephone interviews. They indicated that group sessions typically fare better than the mail survey because someone is present to provide the motivational impetus and to create an atmosphere for discussion which increases the respondent's motivation to provide complete and accurate answers. The group session, if it had been possible, would have facilitated the response since the information request in the present study was relatively detailed by necessity.

The decision on the closing date was based on information about mail surveys (Erdos, 1970). Although the study cited had used air mail stamps, it was a nationwide survey. Compared with first-class postage on the present state-wide survey, the information was considered to be helpful.

On the surveys cited by Erdos, an average of 94% of the total three-week response had already been received two weeks after the mailing date. That time period formula was applied to the present study, and it was found that at the expiration of two-thirds of the total time period, 93% of the total eight-week response had been received. This fact, together with the advice of experienced researchers who had used mail surveys, influenced the researcher of the present study to select a conservative date for closing which represented eight weeks following the initial mailing of the instrument. The initial release of the letter and information request form came on March 9, 1979. The follow-up letter was mailed on April 9, 1979, and the closing date was May 5, 1979.

On receipt of the completed information requests from the respondents, the coded index card was marked and filed separately from the other cards and the tally was posted daily. The survey was in the field for a period of one month before 121 follow-up letters were mailed on April 9, 1979 to those who did not respond initially (see Appendix B). Two hundred sixty-six of the nine-page information requests were returned. This represented a 78% response from the total of 343 persons to whom the instrument had been mailed. Two hundred forty-five (92%) of the responses to the information request were considered usable. Twenty-one returned instruments were unacceptable and were not used for the following reasons: One was received five days too late; one did not wish to participate; one identified himself as a male administrator; two had resigned or retired; three did not serve as administrators; one was deceased; eleven were no longer administrators, and one was on leave.



Sixty (17%) respondents requested copies of the results of the survey. Also, requests for results were received from five male administrators who had learned about the study.

From the women administrators in North Carolina four-year colleges and universities, information was collected on the following questions:

1. What are their professional work experience backgrounds?
2. What are their duties?
3. What are their biographical backgrounds?
4. What are their educational backgrounds?
5. What are their attitudes toward the American sex culture?

The data collected by means of the mail information requests were coded and recorded on general optical scanning forms from which the IBM cards were produced at North Carolina Agricultural and Technical State University. By use of a computer, personnel at the University of North Carolina at Greensboro made runs to get frequencies and percentages and made cross tabulations for Chi Square analyses. The Statistical Package for the Social Sciences was the computer program chosen for treating the data. The resulting information was categorized, analyzed, and presented in Chapter IV in both narrative and tabular form.

#### Treatment and Interpretation of Data

Once the survey was completed and sufficient data were received from the respondents, the information was transferred to tabulation sheets for future computation. An appropriate program for the computation of data and statistical treatment was selected, along with the procedure for transmitting data to the proper forms for programming.

The Statistical Program for the Social Sciences was used for computation and later for interpretation of data. The number and percentage of responses on items, the Chi Square significance of differences as well as subjective evaluations of those items requiring personal comments of respondents were given priority and appropriate treatment in tabular or summary form as needed.

### Statistical Design

The findings of this study were analyzed to answer questions about the relationships between position, rank, and salary of subjects and a series of six control variables. Three types of analysis were employed. (1) Frequency distributions of the relationships of position, rank and salary and the control variables were computed; (2) Chi Square was employed to assess the degrees of significance of these relationships; and (3) informal personal interviews, conducted with selected subjects, were analyzed to assist in interpreting the quantitative data.

Chi Square was selected as the appropriate nonparametric statistical method since the data were in the form of frequency counts occurring in two or more mutually exclusive categories. The data were not in the form of test scores. The Chi Square values were determined as differences between the observed and expected frequencies of responses grouped into categories. Applications of Chi Square were made, where appropriate, to ascertain the level of significance of difference in the distribution. The .05 level of confidence was used for these analyses. Some additional Chi Square calculations were done to provide further information on the findings as they related to the differences between the observed frequency

and the expected frequency. These calculations allowed the researcher to identify the cells of the contingency tables which contributed most to the Chi-Square values. When a significant Chi-Square occurred, the investigator knew that the deviation between the observed frequencies and the expected frequencies was larger than what was expected by chance. In looking at the distribution data of the tables, it was noted that some categories contributed substantially to the Chi-Square value while other categories contributed very little.

To yield exact, rather than approximate probabilities, Fisher's Exact Test was used in lieu of Chi Square with 2 x 2 contingency tables.

Major statistical computations were accomplished through the computer terminal at the University of North Carolina at Greensboro which uses the Triangle Universities Computer Center. The Statistical Package For The Social Sciences (SPSS) was used for computational work. The SPSS was considered to be a comprehensive statistical report-generating system supported by wide-ranging data file facilities.

CHAPTER IV  
ANALYSIS AND DISCUSSION OF DATA  
INTRODUCTION

In Tables 9 through 26, variables regarding professional experience, duties, biographical background, educational background and attitudes were considered under the three classifications of position, academic rank, and salary. The resulting contingency tables, illustrating the relationship between the variables, were analyzed utilizing the computed Chi Square statistics to test for significant differences in the distributions of respondents classified by either position, academic rank or salary and each variable, professional experience, duties, biographical background, educational background and attitudes. The computed Chi Square statistics were tested for significance at the .05 level. With few exceptions, findings were discussed in the same order as they appeared on the information request.

Position

The positions held by the women administrators were divided into two categories according to the usual hierarchical levels of academic administration for higher education. Category I was the designation given all positions of presidents, chancellors and their assistants; vice presidents, vice chancellors and their assistants; deans and associate deans; and business managers. The Category II designation identified all positions of directors, head librarians and others. Distributions of

respondents within these two categories, when identified by each variable, professional experience, duties of the position, biographical background, educational background, attitudes toward the American sex culture, and categorical duties, were compared in order to verify whether there existed a relationship between position and each item.

Professional Experience. Each subject was asked twenty questions about her professional work experience background. It was found that five questions were related to her position and exerted a significant influence at the time she was interrogated. Although the others exerted some influence, the statistics indicated that this information was not significant. The five factors that exerted statistically significant influence were: (1) number of years employed outside of education, 7.19; (2) tenure acquired 7.64; (3) academic promotions at present institution, 20.11; (4) position description change at present institution, 18.10; and (5) present annual salary, 31.10. They were significant at the .05 level, as shown in Table 9. Interpretations of these significant differences between the distribution of respondents classified by position can be done by inspection of the distributions in Table 9.

More subjects in Category I than were expected by chance had spent no time working outside of education since the acquisition of the bachelor's degree. Conversely, fewer of those in Category II than expected by chance had worked outside of the field of education. The same kind of relationship existed on the question of the acquisition of tenure. Thirty-eight subjects in Category I were observed to have tenure although twenty-eight had been expected.

Table 9

Frequencies of Responses and Chi Square Statistics for Women Administrators  
Identified by Position and Professional Experience

| Variable and<br>Category                        | Category |     | Total | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|---|----------|-----|-------|---------------|---------------|-------------|
|   | I        | II  |       |               |               |             |
| Number of Positions Held                        |          |     | 245   | 8             | 14.47         | 0.07        |
| 1-5   | 67       | 101 | 168   |               |               |             |
| Over 5  | 39       | 33  | 72    |               |               |             |
| No Response                                     |          |     | 5     |               |               |             |
| Number of Institutions Served                   |          |     | 245   | 8             | 10.79         | 0.21        |
| 1-5   | 97       | 115 | 212   |               |               |             |
| Over 5  | 7        | 15  | 22    |               |               |             |
| No Response                                     |          |     | 11    |               |               |             |
| Age at Entry to Adm. Position                   |          |     | 245   | 2             | 1.58          | 0.45        |
| Under 20  | 3        | 3   | 6     |               |               |             |
| 21-35   | 65       | 92  | 157   |               |               |             |
| 36+   | 37       | 37  | 74    |               |               |             |
| No Response                                     |          |     | 8     |               |               |             |
| No. years Employed Outside Ed.                  |          |     | 245   | 2             | 7.19          | 0.02*       |
| 1-5   | 33       | 53  | 86    |               |               |             |
| Over 5  | 13       | 22  | 35    |               |               |             |
| None  | 37       | 26  | 63    |               |               |             |
| No Response                                     |          |     | 61    |               |               |             |
| No. Positions in Ed. After<br>Bachelor's degree |          |     | 245   | 1             | 1.69          | 0.19        |
| 1-5   | 59       | 86  | 145   |               |               |             |
| Over 5  | 41       | 40  | 81    |               |               |             |
| No Response                                     |          |     | 19    |               |               |             |
| No. Years at Present Instn..                    |          |     | 245   | 1             | 0.59          | 0.44        |
| 1-5   | 35       | 51  | 86    |               |               |             |
| Over 5  | 72       | 82  | 154   |               |               |             |
| No Response                                     |          |     | 5     |               |               |             |

\*Statistically significant at .05 level

Table 9 (Continued)

| Variable and<br>Category                              | Category |     | Total | Deg. Free. | Chi Square | p-<br>Value |
|---|----------|-----|-------|------------|------------|-------------|
|   | I        | II  |       |            |            |             |
| No. Years in Present Position                         |          |     | 245   | 1          | 0.07       | 0.77        |
| 1-5   | 61       | 73  | 134   |            |            |             |
| Over 5  | 45       | 60  | 105   |            |            |             |
| No Response   |          |     | 6     |            |            |             |
| Tenure Acquired                                       |          |     | 245   | 1          | 7.64       | 0.00*       |
| Yes   | 38       | 26  | 64    |            |            |             |
| No  | 62       | 101 | 163   |            |            |             |
| No Response   |          |     | 18    |            |            |             |
| Academic Promotions At Present<br>Institution         |          |     | 245   | 6          | 20.11      | 0.00*       |
| Lect. to Instructor                                   | 1        | 4   | 5     |            |            |             |
| Instructor to Asst. Prof.                             | 16       | 14  | 30    |            |            |             |
| Asst. Prof. to Assoc. Prof.                           | 12       | 10  | 22    |            |            |             |
| Assoc. Prof. to Professor                             | 3        | 3   | 6     |            |            |             |
| None  | 35       | 80  | 115   |            |            |             |
| Initial Appointment To Adm.                           | 4        | 1   | 5     |            |            |             |
| Other   | 18       | 9   | 27    |            |            |             |
| No Response   |          |     | 35    |            |            |             |
| Position Description Change<br>At Present Institution |          |     | 245   | 7          | 18.10      | 0.01*       |
| Part-time Teach. to Teach./Adm.                       | 5        | 7   | 12    |            |            |             |
| Part-time Teach. to Full Adm.                         | 4        | 2   | 6     |            |            |             |
| Teach./Adm. to Full-time Adm.                         | 11       | 3   | 14    |            |            |             |
| Full-time Teach. to Teach./Adm.                       | 7        | 9   | 16    |            |            |             |
| Full-time Teach. to Full Adm.                         | 11       | 3   | 14    |            |            |             |
| Initial appt. to Adm.                                 | 3        | 3   | 6     |            |            |             |
| Other   | 13       | 29  | 42    |            |            |             |
| None  | 45       | 65  | 110   |            |            |             |
| No Response   |          |     | 25    |            |            |             |
| Present Annual salary                                 |          |     | 245   | 1          | 31.10      | 0.00*       |
| Less Than \$23,000                                    | 58       | 118 | 176   |            |            |             |
| \$23,000 Or More                                      | 50       | 18  | 68    |            |            |             |
| No Response   |          |     | 1     |            |            |             |

\*Statistically significant at .05 level

Table 9 (Continued)

| Variable and<br>Category                                  | Category |    |       | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|---|----------|----|-------|---------------|---------------|-------------|
|   | I        | II | Total |               |               |             |
| Method of Attaining Present Pos.                          |          |    | 265** | 12            | 10.49         | 0.57        |
| Actively Sought It As Goal                                | 10       | 15 | 25    |               |               |             |
| Applied   | 19       | 36 | 55    |               |               |             |
| Was Recruited   | 60       | 60 | 120   |               |               |             |
| Inspired By A Woman                                       | 4        | 9  | 13    |               |               |             |
| Inspired By A Man   | 14       | 14 | 28    |               |               |             |
| Other   | 10       | 13 | 23    |               |               |             |
| No Response   |          |    | 1     |               |               |             |
| Reason For Having Been Selected                           |          |    | 279** | 17            | 19.36         | 0.30        |
| Educational Background                                    | 22       | 33 | 55    |               |               |             |
| Administrative Community,<br>Political or Volunteer Serv. | 7        | 3  | 10    |               |               |             |
| Professional Work Experience                              | 56       | 75 | 131   |               |               |             |
| Affirmative Action Requirements                           | 5        | 4  | 9     |               |               |             |
| Personality Characteristics                               | 21       | 19 | 40    |               |               |             |
| More Than Two Reasons Given                               | 6        | 9  | 15    |               |               |             |
| Other   | 6        | 9  | 15    |               |               |             |
| No Response   |          |    | 4     |               |               |             |
| Job Satisfaction Source                                   |          |    | 258** | 15            | 13.11         | 0.59        |
| Sense of Achievement                                      | 24       | 35 | 59    |               |               |             |
| Sense of Affiliation With<br>Professional Colleagues      | 4        | 3  | 7     |               |               |             |
| Sense of Power  | 0        | 0  | 0     |               |               |             |
| Monetary Rewards  | 1        | 1  | 2     |               |               |             |
| Humanitarian Serv. To Students                            | 23       | 37 | 60    |               |               |             |
| Challenge of Job  | 42       | 41 | 83    |               |               |             |
| Favor Academic Atmosphere                                 | 13       | 22 | 35    |               |               |             |
| More Than Two Sources Given                               | 3        | 2  | 5     |               |               |             |
| Other   | 1        | 4  | 5     |               |               |             |
| No Response   |          |    | 2     |               |               |             |
| Job Aspirations   |          |    | 245   | 5             | 3.44          | 0.63        |
| Become Chief Administrator                                | 5        | 2  | 7     |               |               |             |
| Be Promoted to Another Position                           | 31       | 47 | 78    |               |               |             |
| Remain in Present Position                                | 38       | 48 | 86    |               |               |             |
| Leave Field of Education                                  | 12       | 11 | 23    |               |               |             |
| Retire  | 8        | 11 | 19    |               |               |             |
| Other   | 12       | 17 | 29    |               |               |             |
| No Response   |          |    | 3     |               |               |             |

\*\* Columns total more than 245 because respondents gave multiple responses.



Table 9 (Continued)

| Variable and<br>Category                               | Category |    |       | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|--|----------|----|-------|---------------|---------------|-------------|
|  | I        | II | Total |               |               |             |
| Perceived Constraint or Barrier<br>To Advancement      |          |    | 252** | 6             | 8.54          | 0.20        |
| Sex Discrimination                                     | 24       | 21 | 45    |               |               |             |
| Remain In Present Locale                               | 13       | 23 | 36    |               |               |             |
| Family Responsibilities                                | 6        | 18 | 24    |               |               |             |
| Satisfied With Present Position                        | 35       | 43 | 78    |               |               |             |
| Other  | 24       | 26 | 50    |               |               |             |
| No Response  |          |    | 19    |               |               |             |
| Strengthening of Present Position                      |          |    | 254** | 11            | 9.98          | 0.53        |
| Broader Admin. Involvement                             | 32       | 49 | 81    |               |               |             |
| Additional Formal Study                                | 17       | 24 | 41    |               |               |             |
| Workshops On Pertinent Topics                          | 9        | 12 | 21    |               |               |             |
| Salary Increase  | 14       | 21 | 35    |               |               |             |
| Improved Support System For<br>Collegial Relationships | 16       | 9  | 25    |               |               |             |
| Other  | 17       | 18 | 35    |               |               |             |
| No Response  |          |    | 16    |               |               |             |
| Strongest Influence On Career<br>Pattern               |          |    | 253** | 7             | 5.62          | 0.58        |
| Professional Work Experience                           | 59       | 87 | 146   |               |               |             |
| Biographical Background                                | 8        | 8  | 16    |               |               |             |
| Educational Background                                 | 28       | 30 | 58    |               |               |             |
| American Sex Culture                                   | 4        | 6  | 10    |               |               |             |
| Other  | 6        | 9  | 15    |               |               |             |
| No Response  |          |    | 8     |               |               |             |

\*\*Columns total more than 245 because respondents gave multiple responses.

Post hoc tests revealed that an appreciable number in both categories of administrators had received no academic promotions at their present institutions. With reference to position description changes at their present institutions, it was evident that in both categories, the trend was toward changing from combined duties in teaching/administration or full-time teaching to full-time administration.

In spite of the frequency distribution on the question of present annual salary, careful perusal of the contingency table revealed that in Category I twenty more women than were expected by chance received salaries in excess of \$23,000.

Although a statistically significant Chi Square value was not found in the question of perceived barriers to advancement, it was interesting to find that family responsibilities were considered to be the greatest constraint by both categories.

Regarding sex discrimination, the subjects in Category I saw it as a greater barrier to advancement than those in Category II. In considering the number of positions held, more Category II respondents than expected by chance had held from one to five positions while the observed frequencies of Category I subjects reflected seven more than were expected by chance.

Although the finding was not statistically significant at the .05 level, the researcher was interested in the responses by the subjects in identifying the chief feature which would strengthen and/or improve their present positions. According to the order of contributions toward the Chi Square value, the following results were apparent for both position categories: (1) Improvement of support systems to offer

women administrators collegial relationships with other women administrators, (2) Broader administrative involvement, (3) Salary increase, (4) Additional study, and (5) Availability of workshops treating pertinent topics. This finding was interesting because educational associations tend to utilize workshops as a medium through which support systems can be developed. This could be interpreted to mean that the present sample was a practical group of administrators who would favor more direct techniques for establishing support systems.

Duties of the Position. Each respondent was asked five questions about the duties of her position. Two of these questions were found to be related to her position and exerted a significant influence at the time she was questioned. Although the three others exerted some influence, the statistics indicated that this information was not significant.

The computed Chi Square statistics for (1) decision-making responsibility, 32.75; and (2) chief responsibility, 17.16, were significant at the .05 level, as shown in Table 10. A review of the distributions shown in Table 10 will facilitate interpretation of these significant differences between the distribution of respondents classified by position. Although Chi Square values were not computed on other responsibilities, the frequencies were shown in Table 10 for the respondents' involvement in monitoring policy implementation, communicating decisions by supervisors and delegating authority.

Table 10

Frequencies of Responses and Chi Square Statistics For Women Administrators  
Identified by Position and Duties of the Position

| Variable and<br>Category              | Category |    | Total | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|---------------------------------------|----------|----|-------|---------------|---------------|-------------|
|                                       | I        | II |       |               |               |             |
| Decision-Making Responsibility        |          |    | 245   | 3             | 32.75         | 0.00*       |
| Responsible Direct. To Govg.<br>Board | 1        | 0  | 1     |               |               |             |
| Responsible Direct. To Pres.          | 30       | 6  | 36    |               |               |             |
| Responsible Direct. To V. Pres.       | 45       | 66 | 111   |               |               |             |
| Respons. To One Other Than<br>Above   | 21       | 55 | 76    |               |               |             |
| No Response                           |          |    | 21    |               |               |             |
| Chief Responsibility                  |          |    | 267** | 8             | 17.16         | 0.02*       |
| Responsible For Personnel Aff.        | 16       | 11 | 27    |               |               |             |
| Responsible For Fiscal Aff.           | 6        | 9  | 15    |               |               |             |
| Responsible For Academic Aff.         | 15       | 19 | 34    |               |               |             |
| Responsible For Phys. Aff.            | 1        | 0  | 1     |               |               |             |
| Responsible For Student Aff.          | 38       | 12 | 50    |               |               |             |
| No Response                           |          |    | 140   |               |               |             |
| Monitor Policy Implementation         |          |    | 245   | -             | -             | -           |
| Yes                                   | 38       | 37 | 75    |               |               |             |
| No Response                           |          |    | 170   |               |               |             |
| Communicate Decisions By Supvr.       |          |    | 245   | -             | -             | -           |
| Yes                                   | 29       | 34 | 63    |               |               |             |
| No Response                           |          |    | 182   |               |               |             |
| Delegate Authority to Subord.         |          |    | 245   | -             | -             | -           |
| Yes                                   | 48       | 42 | 90    |               |               |             |
| No Response                           |          |    | 155   |               |               |             |

\*Statistically significant at .05 level

\*\*Columns total more than 245 because respondents gave multiple responses.

In the realm of decision-making responsibility, it was discovered that more subjects in Category I than expected by chance report directly to the president or chancellor. This held true in spite of the frequency distribution which showed the greatest numbers in both categories reported to a vice chancellor or vice president. Scrutiny of the divisions of the universities in which the administrators work revealed that the greatest influence on the computed Chi Square value was in the area of student affairs for both categories, followed by academic affairs.

Biographical Background. According to Table 11, only the Chi Square value for father's occupation, 17.76 was statistically significant at the .05 level. In Category I, 36 of the fathers were involved in business enterprises, and 74 were in similar positions for respondents in Category II.

Further perusal of the results of the question on father's occupation showed that in Category I, ten more than expected by chance had fathers whose occupations were professional.

With regard to birth order, there were more subjects in Category II than in Category I who were first-born in their families but both categories had been a part of a family having from one to five members rather than having come from larger families.

As for marital status, the total number of respondents with husbands was higher in Category II than in Category I. With the categories combined, there were more married women than single women. Among the married women, the greatest number of the husbands were employed in

educational institutions, followed closely by business and professional pursuits. Although 105 had no children, 46 had families of two; 32 had one child and 25 had three. For a total of 253 children, most of them were in the 21+ age group.

Out of 245 respondents, there were only five who had served in the military service for a period of one year. Their duties had been administrative.

The mothers and fathers of the respondents attended high school. Twenty-one of the mothers held bachelor's degrees, and fourteen of the fathers held master's degrees.

Fifty-eight percent of the respondents' mothers were homemakers; fifteen percent were employed in business; fifteen percent were professional workers; and twelve percent were involved in other occupations.

Educational Background. Each subject was asked questions about her educational background which showed the colleges in which she had studied, the financial support of the institutions, the degrees acquired, the age at which each degree was conferred, and the courses and/or experiences which provided the most help in preparation for administrative duties.

Inspection of computed Chi Square statistics in Table 12 showed that distributions of respondents identified by position were not significantly different for any of the educational background variables.

Table 11

Frequencies of Responses and Chi Square Statistics For Women Administrators  
Identified by Position and Biographical Background

| Variable and<br>Category | Category |    | Total | Deg.<br>Free. | Chi<br>Square | p -<br>Value |
|--------------------------|----------|----|-------|---------------|---------------|--------------|
|                          | I        | II |       |               |               |              |
| Age Range                |          |    | 245   | 5             | 2.83          | 0.72         |
| 24 or Under              | 1        | 3  | 4     |               |               |              |
| 25 - 34                  | 20       | 31 | 51    |               |               |              |
| 35 - 44                  | 26       | 36 | 62    |               |               |              |
| 45 - 54                  | 38       | 40 | 78    |               |               |              |
| 55 - 64                  | 20       | 21 | 41    |               |               |              |
| 65 or Above              | 1        | 3  | 4     |               |               |              |
| No Response              |          |    | 5     |               |               |              |
| Birth Order              |          |    | 245   | 2             | 1.24          | 0.53         |
| 1                        | 47       | 66 | 113   |               |               |              |
| 2                        | 29       | 29 | 58    |               |               |              |
| 3+                       | 22       | 31 | 53    |               |               |              |
| No Response              |          |    | 21    |               |               |              |
| Family Size              |          |    | 245   | 1             | 0.00          | 0.99         |
| 1-5                      | 56       | 86 | 142   |               |               |              |
| More Than 5              | 16       | 23 | 39    |               |               |              |
| No Response              |          |    | 64    |               |               |              |
| Marital Status           |          |    | 245   | 5             | 7.12          | 0.21         |
| Single                   | 42       | 35 | 77    |               |               |              |
| Married                  | 44       | 72 | 116   |               |               |              |
| Widowed                  | 3        | 9  | 12    |               |               |              |
| Separated                | 3        | 3  | 6     |               |               |              |
| Divorced                 | 9        | 13 | 22    |               |               |              |
| Remarried                | 3        | 4  | 7     |               |               |              |
| No Response              |          |    | 5     |               |               |              |

Table 11 (Continued)

| Variable and<br>Category   | Category |     | Total | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|----------------------------|----------|-----|-------|---------------|---------------|-------------|
|                            | I        | II  |       |               |               |             |
| Husband's Occupation       |          |     | 245   | 7             | 4.72          | 0.69        |
| No Husband                 | 43       | 45  | 88    |               |               |             |
| Education                  | 18       | 23  | 41    |               |               |             |
| Business                   | 13       | 22  | 35    |               |               |             |
| Professional               | 9        | 18  | 27    |               |               |             |
| Business and Professional  | 1        | 1   | 2     |               |               |             |
| Farmer                     | 0        | 1   | 1     |               |               |             |
| Government                 | 3        | 2   | 5     |               |               |             |
| Other                      | 5        | 10  | 15    |               |               |             |
| No Response                |          |     | 31    |               |               |             |
| Number Of Children         |          |     | 245   | 5             | 2.98          | 0.70        |
| None                       | 49       | 56  | 105   |               |               |             |
| One                        | 13       | 19  | 32    |               |               |             |
| Two                        | 19       | 27  | 46    |               |               |             |
| Three                      | 8        | 17  | 25    |               |               |             |
| Four                       | 3        | 4   | 7     |               |               |             |
| Five                       | 0        | 0   | 0     |               |               |             |
| Six                        | 1        | 4   | 5     |               |               |             |
| Seven Plus                 | 0        | 0   | 0     |               |               |             |
| No Response                |          |     | 25    |               |               |             |
| Age Groups Of Children     |          |     | 253** | 8             | 9.07          | 0.33        |
| 1- 5                       | 7        | 6   | 13    |               |               |             |
| 6-10                       | 3        | 10  | 13    |               |               |             |
| 11-15                      | 8        | 24  | 32    |               |               |             |
| 16-20                      | 15       | 15  | 30    |               |               |             |
| 21+                        | 15       | 23  | 38    |               |               |             |
| No Response                |          |     | 127   |               |               |             |
| Amount of Military Service |          |     | 245   | 1             | 0.07          | 0.78        |
| None                       | 94       | 119 | 213   |               |               |             |
| One year                   | 2        | 3   | 5     |               |               |             |
| More Than One Year         | 0        | 0   | 0     |               |               |             |
| No Response                |          |     | 27    |               |               |             |

\*\*Column totals more than 245 because respondents gave multiple responses.



Table 11 (Continued)

| Variable and<br>Category        | Category |    |       | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|---------------------------------|----------|----|-------|---------------|---------------|-------------|
|                                 | I        | II | Total |               |               |             |
| Military Occupational Specialty |          |    | 245   |               |               | 0.64***     |
| Administrative                  | 2        | 4  | 6     |               |               |             |
| Other                           | 1        | 1  | 2     |               |               |             |
| No Response                     |          |    | 237   |               |               |             |
| Mother's Education              |          |    | 245   | 4             | 1.90          | 0.75        |
| Less Than High School           | 20       | 30 | 50    |               |               |             |
| High School                     | 42       | 44 | 86    |               |               |             |
| Post High School                | 13       | 18 | 31    |               |               |             |
| College                         | 22       | 32 | 54    |               |               |             |
| Advanced Study                  | 6        | 11 | 17    |               |               |             |
| No Response                     |          |    | 7     |               |               |             |
| Mother's Highest Degree         |          |    | 245   | 4             | 7.58          | 0.10        |
| Associate                       | 2        | 0  | 2     |               |               |             |
| Bachelor's                      | 5        | 16 | 21    |               |               |             |
| Master's                        | 4        | 5  | 9     |               |               |             |
| Doctorate                       | 0        | 0  | 0     |               |               |             |
| Honorary Doctorate              | 1        | 0  | 1     |               |               |             |
| Medical Doctorate               | 0        | 1  | 1     |               |               |             |
| No Response                     |          |    | 211   |               |               |             |
| Father's Education              |          |    | 245   | 4             | 7.99          | 0.09        |
| Less Than High School           | 19       | 39 | 58    |               |               |             |
| High School                     | 28       | 35 | 63    |               |               |             |
| Post High School                | 9        | 20 | 29    |               |               |             |
| College                         | 28       | 29 | 57    |               |               |             |
| Advanced Study                  | 17       | 12 | 29    |               |               |             |
| No Response                     |          |    | 9     |               |               |             |
| Father's Highest Degree         |          |    | 245   | 5             | 4.52          | 0.47        |
| Associate                       | 0        | 1  | 1     |               |               |             |
| Bachelor's                      | 5        | 7  | 12    |               |               |             |
| Master's                        | 8        | 6  | 14    |               |               |             |
| Doctorate                       | 3        | 1  | 4     |               |               |             |
| Honorary Doctorate              | 0        | 1  | 1     |               |               |             |
| Medical Doctorate               | 1        | 3  | 4     |               |               |             |
| No Response                     |          |    | 209   |               |               |             |

\*\*\*Fisher's Exact Test

Table 11 (Continued)

| Variable and<br>Category  | Category |    | Total | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|---------------------------|----------|----|-------|---------------|---------------|-------------|
|                           | I        | II |       |               |               |             |
| Mother's Occupation       |          |    | 245   | 3             | 1.43          | 0.69        |
| Homemaker                 | 55       | 81 | 136   |               |               |             |
| Business                  | 15       | 20 | 35    |               |               |             |
| Professional              | 19       | 18 | 37    |               |               |             |
| Other                     | 12       | 15 | 27    |               |               |             |
| No Response               |          |    | 10    |               |               |             |
| Father's Occupation       |          |    | 245   | 4             | 17.76         | 0.00*       |
| Homemaker                 | 2        | 0  | 2     |               |               |             |
| Business                  | 36       | 74 | 110   |               |               |             |
| Professional              | 31       | 17 | 48    |               |               |             |
| Business and professional | 1        | 0  | 1     |               |               |             |
| Other                     | 34       | 43 | 77    |               |               |             |
| No Response               |          |    | 7     |               |               |             |

\*Statistically significant at .05 level

Table 12

Frequencies of Responses and Chi Square Statistics For Women Administrators  
Identified by Position and Educational Background

| Variable and<br>Category      | Category |     | Total | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|-------------------------------|----------|-----|-------|---------------|---------------|-------------|
|                               | I        | II  |       |               |               |             |
| Support of First Institution  |          |     | 245   | 1             | 0.38          | 0.53        |
| Public                        | 52       | 73  | 125   |               |               |             |
| Private                       | 52       | 60  | 112   |               |               |             |
| No Response                   |          |     | 8     |               |               |             |
| First Degree Earned           |          |     | 245   | 3             | 4.05          | 0.25        |
| Associate                     | 10       | 5   | 15    |               |               |             |
| Bachelor's                    | 87       | 119 | 206   |               |               |             |
| Master's                      | 2        | 2   | 4     |               |               |             |
| Registered Nurse              | 2        | 1   | 3     |               |               |             |
| No Response                   |          |     | 17    |               |               |             |
| Age First Degree Earned       |          |     | 245   | 2             | 1.09          | 0.57        |
| Under 20                      | 31       | 32  | 63    |               |               |             |
| 21-35                         | 68       | 95  | 163   |               |               |             |
| 36-50                         | 2        | 2   | 4     |               |               |             |
| 51+                           | 0        | 0   | 0     |               |               |             |
| No Response                   |          |     | 15    |               |               |             |
| Support of Second Institution |          |     | 245   | 1             | 0.02          | 0.87        |
| Public                        | 60       | 64  | 124   |               |               |             |
| Private                       | 3        | 29  | 59    |               |               |             |
| No Response                   |          |     | 62    |               |               |             |
| Second Degree Earned          |          |     | 245   | 3             | 2.69          | 0.44        |
| Bachelor's                    | 17       | 14  | 31    |               |               |             |
| Master's                      | 67       | 75  | 142   |               |               |             |
| Doctorate                     | 2        | 0   | 2     |               |               |             |
| Medical Doctorate             | 1        | 1   | 2     |               |               |             |
| No Response                   |          |     | 68    |               |               |             |

Table 12 (Continued)

| Variable and<br>Category      | Category |    | Total | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|-------------------------------|----------|----|-------|---------------|---------------|-------------|
|                               | I        | II |       |               |               |             |
| Age Second Degree Earned      |          |    | 245   | 3             | 4.67          | 0.19        |
| Under 20                      | 4        | 1  | 5     |               |               |             |
| 21-35                         | 72       | 71 | 143   |               |               |             |
| 36-50                         | 9        | 16 | 25    |               |               |             |
| 51+                           | 0        | 1  | 1     |               |               |             |
| No Response                   |          |    | 71    |               |               |             |
| Support of Third Institution  |          |    | 245   | 1             | 0.04          | 0.83        |
| Public                        | 32       | 25 | 57    |               |               |             |
| Private                       | 23       | 15 | 38    |               |               |             |
| No Response                   |          |    | 150   |               |               |             |
| Third Degree Earned           |          |    | 245   | 3             | 4.41          | 0.22        |
| Bachelor's                    | 1        | 0  | 1     |               |               |             |
| Master's                      | 12       | 14 | 26    |               |               |             |
| Doctorate                     | 37       | 21 | 58    |               |               |             |
| Honorary Doctorate            | 2        | 0  | 2     |               |               |             |
| No Response                   |          |    | 158   |               |               |             |
| Age Third Degree Earned       |          |    | 245   | 2             | 0.65          | 0.71        |
| Under 20                      | 0        | 0  | 0     |               |               |             |
| 21-35                         | 30       | 19 | 49    |               |               |             |
| 36-50                         | 18       | 16 | 34    |               |               |             |
| 51+                           | 2        | 2  | 4     |               |               |             |
| No Response                   |          |    | 158   |               |               |             |
| Support of Fourth Institution |          |    | 245   |               |               | 0.05***     |
| Public                        | 4        | 8  | 12    |               |               |             |
| Private                       | 7        | 2  | 9     |               |               |             |
| No Response                   |          |    | 224   |               |               |             |
| Fourth Degree Earned          |          |    | 245   | 3             | 2.61          | 0.45        |
| Master's                      | 1        | 2  | 3     |               |               |             |
| Doctorate                     | 5        | 7  | 12    |               |               |             |
| Honorary Doctorate            | 1        | 0  | 1     |               |               |             |
| Medical Doctorate             | 1        | 0  | 1     |               |               |             |
| No Response                   |          |    | 228   |               |               |             |

\*\*\*Fisher's Exact Test

Table 12 (Continued)

| Variable and<br>Category | Category |    | Total | Deg. Free. | Chi Square | p-<br>Value |
|--------------------------|----------|----|-------|------------|------------|-------------|
|                          | I        | II |       |            |            |             |
| Age Fourth Degree Earned |          |    | 245   | 2          | 4.23       | 0.12        |
| 21-35                    | 8        | 3  | 11    |            |            |             |
| 36-50                    | 3        | 6  | 9     |            |            |             |
| 51+                      | 0        | 1  | 1     |            |            |             |
| No Response              |          |    | 224   |            |            |             |

Attitudes Toward The American Sex Culture. Although twelve opinions were sought, Table 13 shows that only the Chi Square statistic, 12.82, for the variable 'Women have difficulty supervising men' was statistically significant.

Inspection of the contingency table showed overwhelmingly similar responses by both position categories as they agreed with the statement about women having difficulty supervising men. More respondents in Category II than were expected by chance agreed with this claim.

Inspection of the frequencies for the variable 'husband's attitude toward your administrative career is favorable' revealed that the subjects in Category II indicated agreement to a greater extent than those in Category I.

Table 13

Frequencies of Responses and Chi Square Statistics For Women Administrators  
Identified by Position and Attitudes Toward the American Sex Culture

| Variable and<br>Category   | Category |    | Total | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|--|----------|----|-------|---------------|---------------|-------------|
|  | I        | II |       |               |               |             |
| Sex Discrimination In Hiring and<br>Promoting at Present Institution                   |          |    | 245   | 4             | 2.09          | 0.71        |
| Strongly Agree   | 14       | 11 | 25    |               |               |             |
| Agree  | 21       | 30 | 51    |               |               |             |
| Undecided  | 8        | 13 | 21    |               |               |             |
| Disagree   | 35       | 48 | 83    |               |               |             |
| Strongly Disagree  | 26       | 31 | 57    |               |               |             |
| No Response  |          |    | 8     |               |               |             |
| Adverse Effect on Position Caused<br>by Legislation Treating Discrimination            |          |    | 245   | 4             | 7.90          | 0.09        |
| Strongly Agree   | 1        | 2  | 3     |               |               |             |
| Agree  | 4        | 5  | 9     |               |               |             |
| Undecided  | 9        | 25 | 34    |               |               |             |
| Disagree   | 50       | 67 | 117   |               |               |             |
| Strongly Disagree  | 40       | 33 | 73    |               |               |             |
| No Response  |          |    | 9     |               |               |             |
| Adverse Effect on Co-workers' Attitude<br>Caused By Contemporary Legal Struct.         |          |    | 245   | 4             | 3.50          | 0.47        |
| Strongly Agree   | 0        | 1  | 1     |               |               |             |
| Agree  | 8        | 9  | 17    |               |               |             |
| Undecided  | 11       | 24 | 35    |               |               |             |
| Disagree   | 51       | 61 | 112   |               |               |             |
| Strongly Disagree  | 34       | 38 | 72    |               |               |             |
| No Response  |          |    | 8     |               |               |             |
| Intellectual Achievement of Women is<br>Viewed as competitively Aggressive<br>Behavior |          |    | 245   | 4             | 5.14          | 0.27        |
| Strongly Agree   | 9        | 15 | 24    |               |               |             |
| Agree  | 34       | 54 | 88    |               |               |             |
| Undecided  | 9        | 12 | 21    |               |               |             |
| Disagree   | 37       | 41 | 78    |               |               |             |
| Strongly Disagree  | 15       | 9  | 24    |               |               |             |
| No Response  |          |    | 10    |               |               |             |

Table 13 (Continued)

| Variable and<br>Category   | Category |    | Total | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|--|----------|----|-------|---------------|---------------|-------------|
|  | I        | II |       |               |               |             |
| Marriage is an Asset for Women<br>Administrators                     |          |    | 245   | 4             | 2.00          | 0.73        |
| Strongly Agree   | 10       | 9  | 19    |               |               |             |
| Agree  | 25       | 39 | 64    |               |               |             |
| Undecided  | 32       | 37 | 69    |               |               |             |
| Disagree   | 33       | 37 | 70    |               |               |             |
| Strongly Disagree  | 5        | 9  | 14    |               |               |             |
| No response  |          |    | 9     |               |               |             |
| Husband's Attitude Toward Your<br>Administrative Career is Favorable |          |    | 245   | 4             | 3.88          | 0.42        |
| Strongly Agree   | 26       | 46 | 72    |               |               |             |
| Agree  | 22       | 25 | 47    |               |               |             |
| Undecided  | 4        | 7  | 11    |               |               |             |
| Disagree   | 1        | 7  | 8     |               |               |             |
| Strongly Disagree  | 1        | 2  | 3     |               |               |             |
| No Response (Many Unmarried)   |          |    | 104   |               |               |             |
| Women Have as Much Need Achievement<br>as Men Do                     |          |    | 245   | 3             | 1.99          | 0.57        |
| Strongly Agree   | 83       | 99 | 182   |               |               |             |
| Agree  | 20       | 29 | 49    |               |               |             |
| Undecided  | 0        | 0  | 0     |               |               |             |
| Disagree   | 2        | 3  | 5     |               |               |             |
| Strongly Disagree  | 0        | 2  | 2     |               |               |             |
| No Response  |          |    | 7     |               |               |             |
| Women Have Difficulty Supervising<br>Men                             |          |    | 245   | 4             | 12.82         | 0.01*       |
| Strongly Agree   | 5        | 9  | 14    |               |               |             |
| Agree  | 8        | 31 | 39    |               |               |             |
| Undecided  | 14       | 20 | 34    |               |               |             |
| Disagree   | 52       | 48 | 100   |               |               |             |
| Strongly Disagree  | 26       | 25 | 51    |               |               |             |
| No Response  |          |    | 7     |               |               |             |

\*Statistically significant at .05 level

Table 13 (Continued)

| Variable and<br>Category   | Category |    | Total | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|--|----------|----|-------|---------------|---------------|-------------|
|  | I        | II |       |               |               |             |
| Women Have More Difficulty Supervising<br>Other Women Than Supervising Men |          |    | 245   | 4             | 3.67          | 0.45        |
| Strongly Agree   | 4        | 8  | 12    |               |               |             |
| Agree  | 13       | 22 | 35    |               |               |             |
| Undecided  | 14       | 16 | 30    |               |               |             |
| Disagree   | 45       | 64 | 109   |               |               |             |
| Strongly Disagree  | 28       | 24 | 52    |               |               |             |
| No Response  |          |    | 7     |               |               |             |
| Women Bring Unique Qualities to<br>Administration                          |          |    | 245   | 4             | 1.30          | 0.86        |
| Strongly Agree   | 46       | 59 | 105   |               |               |             |
| Agree  | 38       | 54 | 92    |               |               |             |
| Undecided  | 10       | 12 | 22    |               |               |             |
| Disagree   | 8        | 6  | 14    |               |               |             |
| Strongly Disagree  | 1        | 1  | 2     |               |               |             |
| No Response  |          |    | 10    |               |               |             |
| Satisfied With Adm. Performance  |          |    | 245   | 4             | 8.45          | 0.07        |
| Strongly Agree   | 32       | 29 | 61    |               |               |             |
| Agree  | 61       | 74 | 135   |               |               |             |
| Undecided  | 5        | 10 | 15    |               |               |             |
| Disagree   | 4        | 16 | 20    |               |               |             |
| Strongly Disagree  | 1        | 0  | 1     |               |               |             |
| No Response  |          |    | 13    |               |               |             |



Categorical Duties Identified by Position. An inspection of Table 14 revealed that the variable 'teaching,' with a Chi Square value of 11.88, was the only one which was statistically significant.

The researcher's examination of the contingency table exposed the fact that fewer subjects in Category I than expected had indicated teaching as their major duty.

#### Academic Rank

The respondents were classified according to the following academic ranks--professor, associate professor, assistant professor, instructor, lecturer, or none. Their responses were identified by professional experience, duties of the position, biographical background, educational background and attitudes toward the American sex culture. Comparisons were made to ascertain whether a relationship existed between academic rank and each variable.

Professional Experience. Twenty questions about professional work experience background were asked. It was found that six questions were related to the respondents' academic ranks and exerted a significant influence at the time the questions were answered. Although the others exerted some influence, the statistics indicated that this information was not significant.

Scrutinization of Table 15 resulted in finding the following items statistically significant with these concomitant Chi Square values: (1) age at entry to an administrative position, 32.85; (2) number of years in present institution, 14.88; (3) tenure acquired, 14.72; (4) academic promotions at present institution, 21.99; (5) position description change

Table 14  
Frequencies of Responses and Chi Square Statistics on  
Categorical Duties Identified by Position

| Duties<br>Category | Checked<br>Not<br>Ranked | Ranked |    |    |    |   | Total | No<br>Resp. | Deg.<br>Free. | Chi<br>Square | P-<br>Value |
|--------------------|--------------------------|--------|----|----|----|---|-------|-------------|---------------|---------------|-------------|
|                    |                          | 1      | 2  | 3  | 4  | 5 |       |             |               |               |             |
| Administrative     | 64                       | 140    | 12 | 6  | 2  | 1 | 225   | 20          | 5             | 8.31          | 0.13        |
| Category I         | 26                       | 70     | 2  | 3  | 0  | 0 | 101   |             |               |               |             |
| Category II        | 38                       | 70     | 10 | 3  | 2  | 1 | 124   |             |               |               |             |
| Teaching           | 5                        | 9      | 50 | 20 | 6  | 2 | 92    | 153         | 5             | 11.88         | 0.03*       |
| Category I         | 2                        | 0      | 28 | 10 | 3  | 2 | 45    |             |               |               |             |
| Category II        | 3                        | 9      | 22 | 10 | 3  | 0 | 47    |             |               |               |             |
| Research           | 6                        | 3      | 21 | 29 | 19 | 3 | 81    | 164         | 5             | 2.05          | 0.84        |
| Category I         | 4                        | 1      | 13 | 15 | 11 | 1 | 45    |             |               |               |             |
| Category II        | 2                        | 2      | 8  | 14 | 8  | 2 | 36    |             |               |               |             |
| Consulting         | 8                        | 4      | 32 | 22 | 18 | 2 | 86    | 159         | 5             | 9.78          | 0.08        |
| Category I         | 5                        | 2      | 13 | 14 | 14 | 0 | 48    |             |               |               |             |
| Category II        | 3                        | 2      | 19 | 8  | 4  | 2 | 38    |             |               |               |             |
| Other              | 7                        | 8      | 17 | 10 | 2  | 7 | 51    | 194         | 5             | 4.42          | 0.49        |
| Category I         | 5                        | 2      | 6  | 4  | 1  | 4 | 22    |             |               |               |             |
| Category II        | 2                        | 6      | 11 | 6  | 1  | 3 | 29    |             |               |               |             |

\* Statistically significant at .05 level

Table 15

Frequencies of Responses and Chi Square Statistics For Women Administrators  
Identified by Academic Rank and Professional Experience

| Variable and<br>Category         | Academic Rank |                |                |       |       |      | Total | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|----------------------------------|---------------|----------------|----------------|-------|-------|------|-------|---------------|---------------|-------------|
|                                  | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |               |               |             |
| Number of Positions Held         |               |                |                |       |       |      | 245   | 40            | 40.96         | 0.42        |
| 1-5                              | 20            | 19             | 16             | 11    | 2     | 65   | 133   |               |               |             |
| Over 5                           | 14            | 9              | 10             | 6     | 2     | 24   | 65    |               |               |             |
| No Response                      |               |                |                |       |       |      | 47    |               |               |             |
| Number of Institutions Served    |               |                |                |       |       |      | 245   |               |               |             |
| 1-5                              | 32            | 24             | 25             | 15    | 2     | 77   | 175   |               |               |             |
| Over 5                           | 2             | 2              | 2              | 2     | 1     | 10   | 19    |               |               |             |
| No Response                      |               |                |                |       |       |      | 51    |               |               |             |
| Age At Entry To Admin. Pos.      |               |                |                |       |       |      | 245   | 10            | 32.85         | 0.00*       |
| Under 20                         | 0             | 1              | 2              | 0     | 0     | 1    | 4     |               |               |             |
| 21-35                            | 13            | 14             | 13             | 14    | 3     | 71   | 128   |               |               |             |
| 36+                              | 21            | 11             | 12             | 3     | 1     | 16   | 64    |               |               |             |
| No Response                      |               |                |                |       |       |      | 49    |               |               |             |
| No. Years Employed Outside Educ. |               |                |                |       |       |      | 245   | 10            | 15.72         | 0.10        |
| 1-5                              | 8             | 9              | 9              | 9     | 2     | 41   | 78    |               |               |             |
| Over 5                           | 5             | 2              | 3              | 4     | 1     | 11   | 26    |               |               |             |
| None                             | 14            | 9              | 7              | 0     | 0     | 23   | 53    |               |               |             |
| No Response                      |               |                |                |       |       |      | 88    |               |               |             |

\*Statistically significant at .05 level

Table 15 (Continued)

| Variable and<br>Category                          | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|---|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|   | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| No. Positions In Educ. After<br>Bachelor's Degree |               |                |                |       |       |      | 245   | 5                   | 4.83          | 0.43        |
| 1-5   | 20            | 15             | 17             | 11    | 2     | 59   | 124   |                     |               |             |
| Over 5  | 15            | 12             | 9              | 7     | 1     | 21   | 65    |                     |               |             |
| No Response                                       |               |                |                |       |       |      | 56    |                     |               |             |
| No. Years At Present Instm.                       |               |                |                |       |       |      | 245   | 5                   | 14.88         | 0.01*       |
| 1-5   | 8             | 7              | 6              | 9     | 1     | 44   | 75    |                     |               |             |
| Over 5  | 27            | 21             | 21             | 9     | 1     | 44   | 123   |                     |               |             |
| No Response                                       |               |                |                |       |       |      | 47    |                     |               |             |
| No. Years In Present Position                     |               |                |                |       |       |      | 245   | 5                   | 6.28          | 0.27        |
| 1-5   | 16            | 13             | 16             | 13    | 1     | 58   | 117   |                     |               |             |
| Over 5  | 19            | 12             | 11             | 5     | 2     | 32   | 81    |                     |               |             |
| No Response                                       |               |                |                |       |       |      | 47    |                     |               |             |
| Tenure Acquired                                   |               |                |                |       |       |      | 245   | 5                   | 14.72         | 0.00*       |
| Yes   | 31            | 18             | 12             | 1     | 0     | 2    | 64    |                     |               |             |
| No  | 2             | 10             | 15             | 17    | 4     | 84   | 132   |                     |               |             |
| No Response                                       |               |                |                |       |       |      | 49    |                     |               |             |

\*Statistically significant at .05 level

Table 15 (Continued)

| Variable and<br>Category                              | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|---|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|   | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Academic Promotions At Present<br>Institution         |               |                |                |       |       |      | 245   | 30                  | 21.99         | 0.00*       |
| Lecturer to Instructor                                | 1             | 1              | 0              | 2     | 0     | 1    | 5     |                     |               |             |
| Instructor to Asst. Prof.                             | 5             | 9              | 14             | 0     | 1     | 1    | 30    |                     |               |             |
| Asst. Professor to Asso. Pf.                          | 8             | 12             | 0              | 0     | 1     | 0    | 21    |                     |               |             |
| Asso. Prof. to Professor                              | 6             | 0              | 0              | 0     | 0     | 0    | 6     |                     |               |             |
| None  | 0             | 1              | 1              | 10    | 1     | 72   | 85    |                     |               |             |
| Initial Apptm. to Adm.                                | 4             | 0              | 1              | 0     | 0     | 0    | 5     |                     |               |             |
| Other   | 7             | 1              | 7              | 3     | 0     | 8    | 26    |                     |               |             |
| No Response   |               |                |                |       |       |      | 67    |                     |               |             |
| Position Description Change At<br>Present Institution |               |                |                |       |       |      | 245   | 35                  | 76.39         | 0.00*       |
| P.T.Teach. to Teach./Adm.                             | 5             | 2              | 2              | 1     | 0     | 2    | 12    |                     |               |             |
| P.T.Teach. to Full-Time Adm.                          | 0             | 1              | 3              | 1     | 0     | 1    | 6     |                     |               |             |
| Teach./ Adm. to F.T. Adm.                             | 5             | 3              | 1              | 0     | 1     | 1    | 11    |                     |               |             |
| F. T. Teach to Teach./ Adm.                           | 6             | 3              | 5              | 1     | 0     | 0    | 15    |                     |               |             |
| F. T. Teach. to F. T. Adm.                            | 3             | 4              | 3              | 0     | 0     | 3    | 13    |                     |               |             |
| Other   | 1             | 4              | 2              | 3     | 1     | 22   | 33    |                     |               |             |
| None  | 14            | 8              | 8              | 8     | 1     | 53   | 92    |                     |               |             |
| Init. Appoint. to Adm.                                | 0             | 2              | 1              | 2     | 0     | 1    | 6     |                     |               |             |
| No Response   |               |                |                |       |       |      | 57    |                     |               |             |

\*Statistically significant at .05 level

Table 15 (Continued)

| Variable and<br>Category                | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|---|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|   | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Present Annual Salary                   |               |                |                |       |       |      | 245   | 35                  | 134.65        | 0.00*       |
| \$ 8,000 - \$12,000                     | 1             | 1              | 0              | 3     | 1     | 24   | 30    |                     |               |             |
| 13,000 - 17,000                         | 1             | 4              | 12             | 10    | 2     | 38   | 67    |                     |               |             |
| 18,000 - 22,000                         | 2             | 9              | 6              | 4     | 1     | 21   | 43    |                     |               |             |
| 23,000 - 27,000                         | 10            | 9              | 5              | 1     | 0     | 4    | 29    |                     |               |             |
| 28,000 - 32,000                         | 10            | 2              | 4              | 0     | 0     | 3    | 19    |                     |               |             |
| 33,000 - 37,000                         | 6             | 0              | 0              | 0     | 0     | 0    | 6     |                     |               |             |
| 38,000 - 42,000                         | 3             | 0              | 0              | 0     | 0     | 0    | 3     |                     |               |             |
| More than \$42,000                      | 2             | 2              | 0              | 0     | 0     | 0    | 4     |                     |               |             |
| No Response                             |               |                |                |       |       |      | 44    |                     |               |             |
| Method of Attaining Present<br>Position |               |                |                |       |       |      | 262** | 60                  | 59.01         | 0.51        |
| Actively Sought it as goal              | 4             | 3              | 2              | 1     | 0     | 9    | 19    |                     |               |             |
| Applied                                 | 4             | 7              | 8              | 3     | 2     | 20   | 44    |                     |               |             |
| Was recruited                           | 21            | 18             | 12             | 10    | 2     | 42   | 105   |                     |               |             |
| Inspired by a woman                     | 0             | 0              | 2              | 1     | 0     | 7    | 10    |                     |               |             |
| Inspired by a man                       | 4             | 2              | 4              | 4     | 0     | 10   | 24    |                     |               |             |
| Other                                   | 4             | 2              | 2              | 1     | 0     | 7    | 16    |                     |               |             |
| No Response                             |               |                |                |       |       |      | 44    |                     |               |             |

\*Statistically significant at .05 level

\*\*Column totals more than 245 because respondents gave multiple responses.

Table 15 (Continued)

| Variable and<br>Category                                | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|---|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|   | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Reason for Having Been Selected                         |               |                |                |       |       |      | 274** | 85                  | 84.37         | 0.50        |
| Educational Background                                  | 13            | 5              | 6              | 3     | 0     | 16   | 43    |                     |               |             |
| Administrative Community,<br>Political, Volunteer Serv. | 0             | 1              | 3              | 2     | 0     | 3    | 9     |                     |               |             |
| Professional Work Experience                            | 17            | 15             | 14             | 11    | 3     | 47   | 107   |                     |               |             |
| Affirm. Action Requirements                             | 1             | 0              | 2              | 0     | 0     | 3    | 6     |                     |               |             |
| Personal Characteristics                                | 5             | 5              | 5              | 1     | 0     | 19   | 35    |                     |               |             |
| More Than Two Reasons                                   | 3             | 3              | 1              | 2     | 0     | 4    | 13    |                     |               |             |
| Other   | 1             | 0              | 1              | 1     | 0     | 11   | 14    |                     |               |             |
| No Response   |               |                |                |       |       |      | 47    |                     |               |             |
| Job Satisfaction Source                                 |               |                |                |       |       |      | 255** | 75                  | 61.17         | 0.87        |
| Sense of Achievement                                    | 9             | 4              | 8              | 5     | 2     | 20   | 48    |                     |               |             |
| Sense of Affiliation With<br>Professional Colleagues    | 2             | 1              | 0              | 0     | 0     | 3    | 6     |                     |               |             |
| Sense of Power  | 0             | 0              | 0              | 0     | 0     | 0    | 0     |                     |               |             |
| Monetary Rewards  | 1             | 0              | 0              | 0     | 0     | 1    | 2     |                     |               |             |
| Humanitarian Service To Studs,                          | 3             | 9              | 4              | 7     | 1     | 24   | 48    |                     |               |             |
| Challenge of Job  | 13            | 12             | 12             | 5     | 1     | 25   | 68    |                     |               |             |
| Favor Academic Atmosphere                               | 7             | 4              | 2              | 0     | 0     | 17   | 30    |                     |               |             |
| More Than Two Sources Given                             | 1             | 0              | 0              | 2     | 0     | 2    | 5     |                     |               |             |
| Other   | 0             | 0              | 1              | 0     | 0     | 3    | 4     |                     |               |             |
| No Response   |               |                |                |       |       |      | 44    |                     |               |             |

\*\*Columns total more than 245 because respondents gave multiple responses.

Table 15 (Continued)

| Variable and<br>Category                          | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|---|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|   | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Job Aspirations                                   |               |                |                |       |       |      | 245   | 25                  | 35.38         | 0.08        |
| Become Chief Administrator                        | 1             | 1              | 2              | 1     | 0     | 0    | 5     |                     |               |             |
| Be Promoted To Another Pos.                       | 8             | 10             | 10             | 6     | 2     | 29   | 65    |                     |               |             |
| Remain in Present Position                        | 11            | 7              | 10             | 7     | 2     | 30   | 67    |                     |               |             |
| Leave Field of Education                          | 0             | 1              | 1              | 3     | 0     | 13   | 18    |                     |               |             |
| Retire  | 5             | 4              | 4              | 0     | 0     | 5    | 18    |                     |               |             |
| Other   | 10            | 3              | 0              | 1     | 0     | 13   | 27    |                     |               |             |
| No Response                                       |               |                |                |       |       |      | 45    |                     |               |             |
| Perceived Constraint or Barrier<br>To Advancement |               |                |                |       |       |      | 252** | 30                  | 30.61         | 0.43        |
| Sex Discrimination                                | 6             | 6              | 6              | 2     | 0     | 17   | 37    |                     |               |             |
| Remain In Present Locale                          | 5             | 5              | 3              | 2     | 0     | 15   | 30    |                     |               |             |
| Family Responsibilities                           | 2             | 2              | 3              | 5     | 1     | 4    | 17    |                     |               |             |
| Satisfied With Present Pos.                       | 12            | 9              | 8              | 7     | 2     | 27   | 65    |                     |               |             |
| Other   | 8             | 4              | 3              | 3     | 0     | 26   | 44    |                     |               |             |
| No Response                                       |               |                |                |       |       |      | 59    |                     |               |             |

\*\*Column totals more than 245 because respondents gave multiple responses.



Table 15 (Continued)

| Variable and Category                               | Academic Rank |             |             |       |       |      | Total | Deg. of Free. | Chi Square | p-Value |
|---|---------------|-------------|-------------|-------|-------|------|-------|---------------|------------|---------|
|   | Prof.         | Asso. Prof. | Asst. Prof. | Inst. | Lect. | None |       |               |            |         |
| Strengthening of Present Pos.                       |               |             |             |       |       |      | 254** | 55            | 54.65      | 0.49    |
| Broader Admin. Involvement                          | 11            | 6           | 8           | 3     | 2     | 33   | 63    |               |            |         |
| Additional Formal Study                             | 2             | 1           | 6           | 9     | 1     | 19   | 38    |               |            |         |
| Workshops on Pertinent Topics                       | 1             | 3           | 2           | 1     | 0     | 8    | 15    |               |            |         |
| Salary Increase                                     | 4             | 5           | 3           | 2     | 1     | 15   | 30    |               |            |         |
| Improved Support System For Collegial Relationships | 5             | 4           | 3           | 1     | 0     | 7    | 20    |               |            |         |
| Other   | 8             | 6           | 3           | 4     | 0     | 12   | 33    |               |            |         |
| No Response   |               |             |             |       |       |      | 55    |               |            |         |
| Strongest Influence on Career Pattern               |               |             |             |       |       |      | 252** | 35            | 15.54      | 0.99    |
| Professional Work Experience                        | 17            | 18          | 16          | 10    | 4     | 55   | 120   |               |            |         |
| Biographical Background                             | 1             | 1           | 3           | 2     | 0     | 7    | 14    |               |            |         |
| Educational Background                              | 11            | 7           | 7           | 3     | 0     | 20   | 48    |               |            |         |
| American Sex Culture                                | 3             | 1           | 1           | 1     | 0     | 3    | 9     |               |            |         |
| Other   | 1             | 1           | 1           | 1     | 0     | 8    | 12    |               |            |         |
| No Response   |               |             |             |       |       |      | 49    |               |            |         |

\*\*Columns total more than 245 because respondents gave multiple responses.

at present institution, 76.39; and (6) present annual salary, 134.65.

Analysis of the contingency tables showing age at entry to an administrative position showed that there were more professors and persons without academic rank than expected by chance who had entered administration after age thirty-six. In the same table, it was revealed that there were fewer associate professors, assistant professors, instructors and lecturers than expected to have entered administration before age twenty-one. This presents a realistic picture because administrative positions tend to be assumed after the acquisition of at least the master's degree.

Focus on the number of years at present institution showed that more associate professors and assistant professors than expected by chance had been at their present institutions for a period of more than five years. The next highest contributors to the total Chi Square value were found to be professors, instructors, lecturers and those without academic rank who had been in their present institutions from one to five years.

In considering tenure, fewer professors and assistant professors than expected were without tenure. The promotions which tended to show a consistent pattern were from assistant to associate and from associate professor to professor.

When position description changes at the present institution were viewed according to academic rank, more professors than expected had moved from part-time teaching to teaching/administration. Fewer associate professors than expected by chance had changed from part-time teaching to full-time administration. The number of assistant professors whose initial

appointment was made to an administrative position was lower than expected. It was interesting to note that combinations of teaching and administration exceeded the frequency of change from full-time teaching to full-time administration.

The salaries received by the respondents, when viewed according to academic rank, showed that five more professors than expected by chance had incomes in the range of \$33,000 to \$37,000. More associate professors than expected received salaries from \$23,000 to \$27,000.

With regard to the respondents' perception of sex discrimination as a barrier to advancement, the persons with ranks above instructor showed that they perceive it to be a barrier. The same is true of persons without academic rank; however, a surprising number of all were very satisfied with their present positions as they currently exist.

The factor most often shown as the possible source of strengthening the present positions was broader administrative involvement.

The strongest influence on the respondents' career patterns was professional work experience, not educational background. This feature supported another finding that on-the-job training is extremely vital.

Duties of the Position. In spite of the existence of five questions related to academic rank, only the Chi Square statistic of 89.80 for respondents identified by rank and 'chief responsibility' was significant at the .05 level, as reflected in Table 16. The contingency table analysis showed that more associate and assistant professors than expected have

Table 16

## Frequencies of Responses and Chi Square Statistics For Women Administrators

Identified by Academic Rank and Duties of The Position

| Variable and<br>Category                    | Academic Rank |                |                |       |       |      | Total | Deg.<br>Free. | Chi<br>Square | P-<br>Value |
|---|---------------|----------------|----------------|-------|-------|------|-------|---------------|---------------|-------------|
|   | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |               |               |             |
| Decision-Making Resp.                       |               |                |                |       |       |      | 245   | 15            | 16.38         | 0.36        |
| Respon. Direct. To Govg.<br>Board           | 0             | 0              | 1              | 0     | 0     | 0    | 1     |               |               |             |
| Respons. Direct. To Pres.                   | 5             | 3              | 3              | 3     | 0     | 13   | 27    |               |               |             |
| Respons. Direct. To V. Pres.                | 16            | 12             | 14             | 10    | 4     | 34   | 90    |               |               |             |
| Respons. Direct. To One Other<br>Than Above | 8             | 12             | 7              | 4     | 0     | 35   | 66    |               |               |             |
| No Response                                 |               |                |                |       |       |      | 61    |               |               |             |
| Chief Responsibility                        |               |                |                |       |       |      | 262** | 40            | 89.80         | 0.00*       |
| Respons. For Personnel Aff.                 | 10            | 1              | 3              | 3     | 0     | 4    | 21    |               |               |             |
| Respons. For Fiscal Aff.                    | 2             | 0              | 1              | 2     | 0     | 6    | 11    |               |               |             |
| Respons. For Academic Aff.                  | 8             | 6              | 6              | 3     | 0     | 7    | 30    |               |               |             |
| Respons. For Physical Aff.                  | 0             | 1              | 0              | 0     | 0     | 0    | 1     |               |               |             |
| Respons. For Student Aff.                   | 9             | 2              | 5              | 3     | 1     | 21   | 41    |               |               |             |
| No Response                                 |               |                |                |       |       |      | 158   |               |               |             |
| Monitor Policy Implement.                   |               |                |                |       |       |      | 245   | -             | -             | -           |
| Yes   | 15            | 7              | 10             | 5     | 1     | 26   | 64    |               |               |             |
| No Response                                 |               |                |                |       |       |      | 181   |               |               |             |

\*Statistically significant at .05 level

\*\*Column totals more than 245 because respondents gave multiple responses.

Table 16 (Continued)

| Variable and<br>Category               | Academic Rank |               |                 |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|--|---------------|---------------|-----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|  | Prof.         | Assq<br>Prof. | Ass.t.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Communicate Decisions By<br>Supervisor |               |               |                 |       |       |      | 245   | -                   | -             | -           |
| Yes                                    | 11            | 4             | 8               | 3     | 1     | 22   | 49    |                     |               |             |
| No Response                            |               |               |                 |       |       |      | 196   |                     |               |             |
| Delegate Authority To<br>Subordinates  |               |               |                 |       |       |      | 245   | -                   | -             | -           |
| Yes                                    | 13            | 7             | 13              | 4     | 1     | 33   | 71    |                     |               |             |
| No Response                            |               |               |                 |       |       |      | 174   |                     |               |             |

academic duties. Those dealing with fiscal affairs held the rank of instructor and the student affairs administrators had no academic rank. More professors than expected by chance had personnel duties as their chief responsibility.

Biographical Background. Each subject was asked ten questions about her biographical background. It was found that two questions were significantly related to her academic rank and exerted a significant influence at the time. Although the others exerted influence, the statistics indicated that this information was not significant.

Table 17 demonstrated that statistically significant Chi Square values existed for (1) age range, 47.85; and (2) marital status, 47.03 for respondents identified by academic rank. The greatest contribution to the total Chi Square value comes from the fact that there are more professors who were in the age range 55-64 than the number that would be expected by chance, and there were more administrators without academic rank in the age range 25-34 than the number that would be expected by chance. These two cells alone contributed 18.67 (10.67 and 8.00) to the total Chi Square value of 47.85.

An inspection of the contingency table shows that the statistically significant relationship between academic rank and marital status was due to the fact that fewer of all ranks than expected are single, separated, widowed or divorced. Forty-eight percent of the respondents are married women.

Table 17

Frequencies of Responses and Chi Square Statistics For Women Administrators  
Identified by Academic Rank and Biographical Background

| Variable and<br>Category | Academic Rank |                |                |       |       |      | Total | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|--------------------------|---------------|----------------|----------------|-------|-------|------|-------|---------------|---------------|-------------|
|                          | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |               |               |             |
| Age Range                |               |                |                |       |       |      | 245   | 25            | 47.85         | 0.00*       |
| 24 or Under              | 0             | 0              | 0              | 1     | 0     | 3    | 4     |               |               |             |
| 25 - 34                  | 1             | 3              | 5              | 3     | 0     | 30   | 42    |               |               |             |
| 35 - 44                  | 6             | 7              | 6              | 9     | 1     | 18   | 47    |               |               |             |
| 45 - 54                  | 11            | 12             | 11             | 3     | 2     | 26   | 65    |               |               |             |
| 55 - 64                  | 14            | 5              | 3              | 2     | 1     | 10   | 35    |               |               |             |
| 65 Or Above              | 1             | 0              | 2              | 0     | 0     | 1    | 4     |               |               |             |
| No Response              |               |                |                |       |       |      | 48    |               |               |             |
| Birth Order              |               |                |                |       |       |      | 245   | 10            | 5.70          | 0.83        |
| 1                        | 15            | 13             | 16             | 6     | 1     | 41   | 92    |               |               |             |
| 2                        | 10            | 6              | 6              | 6     | 1     | 25   | 54    |               |               |             |
| 3+                       | 6             | 4              | 4              | 5     | 2     | 17   | 38    |               |               |             |
| No Response              |               |                |                |       |       |      | 61    |               |               |             |
| Family Size              |               |                |                |       |       |      | 245   | 5             | 5.99          | 0.30        |
| 1-5                      | 14            | 13             | 18             | 10    | 2     | 62   | 119   |               |               |             |
| More Than 5              | 7             | 5              | 4              | 2     | 1     | 9    | 28    |               |               |             |
| No Response              |               |                |                |       |       |      | 98    |               |               |             |

\*Statistically significant at .05 level

Table 17 (Continued)

| Variable and<br>Category  | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|---------------------------|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|                           | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Marital Status            |               |                |                |       |       |      | 245   | 25                  | 47.03         | 0.00**      |
| Single                    | 16            | 7              | 7              | 2     | 1     | 30   | 63    |                     |               |             |
| Married                   | 10            | 13             | 17             | 13    | 0     | 41   | 94    |                     |               |             |
| Widowed                   | 2             | 2              | 2              | 0     | 2     | 3    | 11    |                     |               |             |
| Separated                 | 1             | 0              | 0              | 1     | 1     | 3    | 6     |                     |               |             |
| Divorced                  | 4             | 5              | 1              | 2     | 0     | 8    | 20    |                     |               |             |
| Remarried                 | 0             | 0              | 0              | 0     | 0     | 4    | 4     |                     |               |             |
| No Response               |               |                |                |       |       |      | 47    |                     |               |             |
| Husband's Occupation      |               |                |                |       |       |      | 245   | 30                  | 37.73         | 0.15        |
| No Husband                | 17            | 10             | 9              | 2     | 2     | 36   | 76    |                     |               |             |
| Education                 | 4             | 9              | 5              | 2     | 0     | 14   | 34    |                     |               |             |
| Business                  | 2             | 1              | 3              | 4     | 0     | 16   | 26    |                     |               |             |
| Professional              | 2             | 4              | 3              | 5     | 1     | 9    | 24    |                     |               |             |
| Business and Professional | 0             | 0              | 1              | 0     | 0     | 1    | 2     |                     |               |             |
| Farmer                    | 0             | 0              | 0              | 0     | 0     | 0    | 0     |                     |               |             |
| Government                | 2             | 0              | 1              | 1     | 0     | 0    | 4     |                     |               |             |
| Other                     | 1             | 0              | 3              | 1     | 0     | 7    | 12    |                     |               |             |
| No Response               |               |                |                |       |       |      | 67    |                     |               |             |

\*Statistically significant at .05 level



Table 17 (Continued)

| Variable and<br>Category   | Academic Rank |                |                |       |       |      | Total             | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|----------------------------|---------------|----------------|----------------|-------|-------|------|-------------------|---------------------|---------------|-------------|
|                            | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |                   |                     |               |             |
| Number of Children         |               |                |                |       |       |      | 245               | 25                  | 25.79         | 0.41        |
| None                       | 12            | 11             | 9              | 5     | 3     | 47   | 87                |                     |               |             |
| One                        | 4             | 5              | 3              | 3     | 0     | 12   | 27                |                     |               |             |
| Two                        | 4             | 5              | 9              | 4     | 0     | 17   | 39                |                     |               |             |
| Three                      | 5             | 4              | 1              | 2     | 1     | 6    | 19                |                     |               |             |
| Four                       | 1             | 1              | 1              | 2     | 0     | 0    | 5                 |                     |               |             |
| Five                       | 0             | 0              | 0              | 0     | 0     | 0    | 0                 |                     |               |             |
| Six                        | 0             | 0              | 1              | 0     | 0     | 4    | 5                 |                     |               |             |
| Seven Plus                 | 0             | 0              | 0              | 0     | 0     | 0    | 0                 |                     |               |             |
| No Response                |               |                |                |       |       |      | 63                |                     |               |             |
| Age Groups Of Children     |               |                |                |       |       |      | 253 <sup>**</sup> | 28                  | 33.19         | 0.22        |
| 1 - 5                      | 0             | 3              | 1              | 0     | 0     | 3    | 7                 |                     |               |             |
| 6 - 10                     | 1             | 0              | 1              | 4     | 0     | 6    | 12                |                     |               |             |
| 11 - 15                    | 2             | 4              | 5              | 5     | 0     | 7    | 23                |                     |               |             |
| 16 - 20                    | 3             | 3              | 4              | 2     | 3     | 14   | 29                |                     |               |             |
| 21+                        | 9             | 5              | 5              | 2     | 0     | 11   | 32                |                     |               |             |
| No Response                |               |                |                |       |       |      | 150               |                     |               |             |
| Amount of Military Service |               |                |                |       |       |      | 245               | 5                   | 2.24          | 0.81        |
| None                       | 28            | 25             | 25             | 17    | 4     | 82   | 181               |                     |               |             |
| One Year                   | 0             | 0              | 0              | 0     | 0     | 0    | 0                 |                     |               |             |
| More Than One Year         | 1             | 1              | 0              | 0     | 0     | 1    | 3                 |                     |               |             |
| No Response                |               |                |                |       |       |      | 61                |                     |               |             |

<sup>\*\*</sup> Column totals more than 245 because respondents gave multiple responses.

Table 17 (Continued)

| Variable and<br>Category        | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|---------------------------------|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|                                 | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Military Occupational Specialty |               |                |                |       |       |      | 245   | 2                   | 5.00          | 0.08        |
| Administrative                  | 0             | 1              | 0              | 0     | 0     | 3    | 4     |                     |               |             |
| Other                           | 1             | 0              | 0              | 0     | 0     | 0    | 1     |                     |               |             |
| No Response                     |               |                |                |       |       |      | 240   |                     |               |             |
| Mother's Education              |               |                |                |       |       |      | 245   | 20                  | 25.93         | 0.16        |
| Less Than High School           | 9             | 9              | 9              | 2     | 0     | 12   | 41    |                     |               |             |
| High School                     | 8             | 10             | 7              | 7     | 3     | 29   | 64    |                     |               |             |
| Post High School                | 4             | 2              | 3              | 0     | 0     | 19   | 28    |                     |               |             |
| College                         | 9             | 6              | 7              | 4     | 1     | 23   | 50    |                     |               |             |
| Advanced Study                  | 3             | 1              | 0              | 3     | 0     | 6    | 13    |                     |               |             |
| No Response                     |               |                |                |       |       |      | 49    |                     |               |             |
| Mother's Highest Degree         |               |                |                |       |       |      | 245   | 16                  | 16.82         | 0.39        |
| Associate                       | 0             | 0              | 0              | 0     | 0     | 2    | 2     |                     |               |             |
| Bachelor's                      | 3             | 2              | 4              | 1     | 0     | 7    | 17    |                     |               |             |
| Master's                        | 2             | 1              | 0              | 3     | 0     | 3    | 9     |                     |               |             |
| Doctorate                       | 0             | 0              | 0              | 0     | 0     | 0    | 0     |                     |               |             |
| Honorary Doctorate              | 0             | 0              | 0              | 0     | 0     | 1    | 1     |                     |               |             |
| Medical Doctorate               | 0             | 1              | 0              | 0     | 0     | 0    | 1     |                     |               |             |
| No Response                     |               |                |                |       |       |      | 215   |                     |               |             |

Table 17 (Continued)

| Variable and<br>Category | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|--------------------------|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|                          | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Father's Education       |               |                |                |       |       |      | 245   | 20                  | 17.32         | 0.63        |
| Less Than High School    | 10            | 9              | 8              | 3     | 2     | 14   | 46    |                     |               |             |
| High School              | 6             | 5              | 4              | 5     | 2     | 33   | 55    |                     |               |             |
| Post High School         | 4             | 4              | 3              | 1     | 0     | 11   | 23    |                     |               |             |
| College                  | 9             | 8              | 7              | 3     | 0     | 21   | 48    |                     |               |             |
| Advanced Study           | 4             | 2              | 4              | 3     | 0     | 10   | 23    |                     |               |             |
| No Response              |               |                |                |       |       |      | 50    |                     |               |             |
| Father's Highest Degree  |               |                |                |       |       |      | 245   | 20                  | 18.51         | 0.55        |
| Associate                | 0             | 0              | 0              | 0     | 0     | 1    | 1     |                     |               |             |
| Bachelor's               | 1             | 1              | 1              | 1     | 1     | 5    | 9     |                     |               |             |
| Master's                 | 1             | 1              | 2              | 1     | 0     | 8    | 13    |                     |               |             |
| Doctorate                | 1             | 0              | 0              | 1     | 0     | 0    | 2     |                     |               |             |
| Honorary Doctorate       | 0             | 1              | 0              | 0     | 0     | 0    | 1     |                     |               |             |
| Medical Doctorate        | 1             | 1              | 1              | 1     | 0     | 0    | 4     |                     |               |             |
| No Response              |               |                |                |       |       |      | 215   |                     |               |             |
| Mother's Occupation      |               |                |                |       |       |      | 245   | 15                  | 21.99         | 0.10        |
| Homemaker                | 23            | 11             | 12             | 8     | 4     | 52   | 110   |                     |               |             |
| Business                 | 2             | 7              | 5              | 1     | 0     | 17   | 32    |                     |               |             |
| Professional             | 7             | 4              | 3              | 4     | 0     | 13   | 31    |                     |               |             |
| Other                    | 1             | 5              | 5              | 4     | 0     | 6    | 21    |                     |               |             |
| No Response              |               |                |                |       |       |      | 51    |                     |               |             |

Table 17 (Continued)

| Variable and<br>Category  | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|---------------------------|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|                           | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Father's Occupation       |               |                |                |       |       |      | 245   | 20                  | 25.98         | 0.16        |
| Homemaker                 | 0             | 0              | 1              | 0     | 0     | 1    | 2     |                     |               |             |
| Business                  | 14            | 10             | 14             | 5     | 2     | 49   | 94    |                     |               |             |
| Professional              | 11            | 4              | 4              | 6     | 0     | 10   | 35    |                     |               |             |
| Business and Professional | 1             | 0              | 0              | 0     | 0     | 0    | 1     |                     |               |             |
| Other                     | 7             | 14             | 7              | 6     | 1     | 29   | 64    |                     |               |             |
| No Response               |               |                |                |       |       |      | 49    |                     |               |             |

The majority of the respondents with rank who were first-born children were professor, associate professors and assistant professors. Their family size concentrated around the 1-5 level. Regardless of rank, the administrators were identified as being married to men engaged in education and had children in the 21+ category. Their mothers, especially those of professors, were homemakers, and their fathers were involved in business pursuits.

Educational Background. An inspection of Table 18 revealed significant Chi Square computations for (1) the first degree earned, 26.30, and (2) the age at which the first degree was earned, 22.39.

Those without academic rank had received the associate degree first and fewer associate professors, assistant professors and lecturers than anticipated had received that degree. Emphasis on the age at which the first degree was earned revealed that more professors, associate professors and those without academic rank had acquired their first degrees before reaching the age of twenty.

Throughout the distribution of support of the institutions from which the respondents received their degrees, there is evidence that they chose public institutions.

Attitudes Toward The American Sex Culture. Opinions on twelve questions were solicited to see the relationships between rank and attitudes toward the American sex culture. The items (1) husband's attitude toward your administrative career is favorable, 40.14, and (2) women bring unique qualities to administration, 45.45, were found to be significant at the .05 level, as shown in Table 19.

Table 18

## Frequencies of Responses and Chi Square Statistics For Women Administrators

## Identified by Academic Rank and Educational Background

| Variable and Category        | Academic Rank |             |             |       |       |      | Total | Deg. Free. | Chi Square | p-Value |
|------------------------------|---------------|-------------|-------------|-------|-------|------|-------|------------|------------|---------|
|                              | Prof.         | Asso. Prof. | Asst. Prof. | Inst. | Lect. | None |       |            |            |         |
| Support of First Institution |               |             |             |       |       |      | 245   | 5          | 3.48       | 0.62    |
| Public                       | 19            | 13          | 17          | 10    | 3     | 44   | 106   |            |            |         |
| Private                      | 15            | 15          | 9           | 7     | 1     | 44   | 91    |            |            |         |
| No Response                  |               |             |             |       |       |      | 48    |            |            |         |
| First Degree Earned          |               |             |             |       |       |      | 245   | 15         | 26.30      | 0.03*   |
| Associate                    | 1             | 0           | 0           | 2     | 1     | 8    | 12    |            |            |         |
| Bachelor's                   | 29            | 26          | 25          | 13    | 3     | 75   | 171   |            |            |         |
| Master's                     | 0             | 0           | 1           | 1     | 0     | 2    | 4     |            |            |         |
| Registered Nurse             | 3             | 0           | 0           | 0     | 0     | 0    | 3     |            |            |         |
| No Response                  |               |             |             |       |       |      | 55    |            |            |         |
| Age First Degree Earned      |               |             |             |       |       |      | 245   | 10         | 22.39      | 0.01*   |
| Under 20                     | 13            | 17          | 5           | 3     | 1     | 18   | 57    |            |            |         |
| 21-35                        | 21            | 10          | 20          | 13    | 3     | 64   | 131   |            |            |         |
| 36-50                        | 0             | 0           | 1           | 0     | 0     | 2    | 3     |            |            |         |
| 51+                          | 0             | 0           | 0           | 0     | 0     | 0    | 0     |            |            |         |
| No Response                  |               |             |             |       |       |      | 54    |            |            |         |

\*Statistically significant at .05 level

Table 18 (Continued)

| Variable and<br>Category     | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|------------------------------|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|                              | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Support Of Second Instn.     |               |                |                |       |       |      | 245   | 5                   | 7.36          | 0.19        |
| Public                       | 18            | 17             | 18             | 8     | 2     | 46   | 109   |                     |               |             |
| Private                      | 16            | 11             | 6              | 6     | 1     | 14   | 54    |                     |               |             |
| No Response                  |               |                |                |       |       |      | 82    |                     |               |             |
| Second Degree Earned         |               |                |                |       |       |      | 245   | 15                  | 10.02         | 0.81        |
| Bachelor's                   | 8             | 3              | 4              | 3     | 0     | 11   | 29    |                     |               |             |
| Master's                     | 25            | 23             | 19             | 10    | 2     | 46   | 125   |                     |               |             |
| Doctorate                    | 1             | 0              | 0              | 0     | 0     | 0    | 1     |                     |               |             |
| Medical Doctorate            | 0             | 1              | 1              | 0     | 0     | 0    | 2     |                     |               |             |
| No Response                  |               |                |                |       |       |      | 88    |                     |               |             |
| Age Second Degree Earned     |               |                |                |       |       |      | 245   | 15                  | 18.99         | 0.21        |
| Under 20                     | 2             | 0              | 1              | 1     | 0     | 1    | 5     |                     |               |             |
| 21-35                        | 29            | 26             | 14             | 11    | 1     | 44   | 125   |                     |               |             |
| 36-50                        | 2             | 2              | 7              | 2     | 1     | 10   | 24    |                     |               |             |
| 51+                          | 0             | 0              | 1              | 0     | 0     | 0    | 1     |                     |               |             |
| No Response                  |               |                |                |       |       |      | 90    |                     |               |             |
| Support of Third Institution |               |                |                |       |       |      | 245   | 5                   | 7.79          | 0.16        |
| Public                       | 13            | 15             | 11             | 1     | 0     | 11   | 51    |                     |               |             |
| Private                      | 16            | 8              | 2              | 1     | 1     | 8    | 36    |                     |               |             |
| No Response                  |               |                |                |       |       |      | 158   |                     |               |             |

Table 18 (Continued)

| Variable and<br>Category | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|--------------------------|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|                          | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Third Degree Earned      |               |                |                |       |       |      | 245   | 15                  | 16.26         | 0.36        |
| Bachelor's               | 0             | 0              | 1              | 0     | 0     | 0    | 1     |                     |               |             |
| Master's                 | 8             | 5              | 1              | 1     | 1     | 7    | 23    |                     |               |             |
| Doctorate                | 19            | 16             | 10             | 0     | 0     | 8    | 53    |                     |               |             |
| Honorary Doctorate       | 1             | 1              | 0              | 0     | 0     | 0    | 2     |                     |               |             |
| No Response              |               |                |                |       |       |      | 166   |                     |               |             |
| Age Third Degree Earned  |               |                |                |       |       |      | 245   | 10                  | 6.72          | 0.75        |
| Under 20                 | 0             | 0              | 0              | 0     | 0     | 0    | 0     |                     |               |             |
| 21-35                    | 14            | 11             | 4              | 1     | 1     | 11   | 42    |                     |               |             |
| 36-50                    | 13            | 11             | 6              | 0     | 0     | 3    | 33    |                     |               |             |
| 51+                      | 1             | 1              | 1              | 0     | 0     | 1    | 4     |                     |               |             |
| No Response              |               |                |                |       |       |      | 166   |                     |               |             |
| Support of Fourth Instn. |               |                |                |       |       |      | 245   | 4                   | 4.96          | 0.29        |
| Public                   | 3             | 2              | 3              | 1     | 0     | 1    | 10    |                     |               |             |
| Private                  | 6             | 2              | 0              | 0     | 0     | 1    | 9     |                     |               |             |
| No Response              |               |                |                |       |       |      | 226   |                     |               |             |
| Fourth Degree Earned     |               |                |                |       |       |      | 245   | 9                   | 11.83         | 0.22        |
| Master's                 | 1             | 1              | 0              | 0     | 0     | 0    | 2     |                     |               |             |
| Doctorate                | 7             | 2              | 2              | 0     | 0     | 1    | 12    |                     |               |             |
| Honorary Doctorate       | 0             | 0              | 0              | 0     | 0     | 1    | 1     |                     |               |             |
| Medical Doctorate        | 0             | 1              | 0              | 0     | 0     | 0    | 1     |                     |               |             |
| No Response              |               |                |                |       |       |      | 229   |                     |               |             |



Table 18 (Continued)

| Variable and<br>Category | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|--------------------------|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|                          | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Age Fourth Degree Earned |               |                |                |       |       |      | 245   | 8                   | 5.27          | 0.72        |
| 21-35                    | 4             | 3              | 0              | 0     | 1     | 1    | 9     |                     |               |             |
| 36-50                    | 5             | 1              | 2              | 0     | 0     | 1    | 9     |                     |               |             |
| 51+                      | 1             | 0              | 0              | 0     | 0     | 0    | 1     |                     |               |             |
| No Response              |               |                |                |       |       |      | 226   |                     |               |             |

Table 19

Frequencies of Responses and Chi Square Statistics For Women Administrators

Identified by Academic Rank and Attitudes Toward the American Sex Culture

| Variable and<br>Category   | Academic Rank |                |                |       |       |      | Total | Deg.<br>Free. | Chi<br>Square | p-<br>Value |
|--|---------------|----------------|----------------|-------|-------|------|-------|---------------|---------------|-------------|
|  | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |               |               |             |
| Sex Discrimination In<br>Hiring And Promoting<br>At Present Institution        |               |                |                |       |       |      | 245   | 20            | 13.86         | 0.83        |
| Strongly Agree   | 3             | 2              | 3              | 2     | 1     | 10   | 21    |               |               |             |
| Agree  | 6             | 5              | 6              | 4     | 1     | 22   | 44    |               |               |             |
| Undecided  | 4             | 2              | 2              | 3     | 1     | 5    | 17    |               |               |             |
| Disagree   | 9             | 14             | 10             | 5     | 1     | 30   | 69    |               |               |             |
| Strongly Disagree  | 12            | 4              | 5              | 3     | 0     | 22   | 46    |               |               |             |
| No Response  |               |                |                |       |       |      | 48    |               |               |             |
| Adverse Effect On Position<br>Caused by Legislation<br>Treating Discrimination |               |                |                |       |       |      | 245   | 20            | 17.79         | 0.60        |
| Strongly Agree   | 0             | 0              | 0              | 1     | 0     | 0    | 1     |               |               |             |
| Agree  | 2             | 1              | 0              | 0     | 0     | 4    | 7     |               |               |             |
| Undecided  | 4             | 2              | 4              | 4     | 0     | 14   | 28    |               |               |             |
| Disagree   | 17            | 14             | 10             | 7     | 3     | 44   | 95    |               |               |             |
| Strongly Disagree  | 11            | 10             | 11             | 6     | 1     | 26   | 65    |               |               |             |
| No Response  |               |                |                |       |       |      | 49    |               |               |             |

Table 19 (Continued)

| Variable and<br>Category  | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|---|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|   | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Adverse Effect on Co-Work.<br>Attitude Caused By Contemp.<br>Legal Structure              |               |                |                |       |       |      | 245   | 15                  | 14.97         | 0.45        |
| Strongly Agree  | 0             | 0              | 0              | 0     | 0     | 0    | 0     |                     |               |             |
| Agree   | 2             | 2              | 1              | 2     | 0     | 6    | 13    |                     |               |             |
| Undecided   | 3             | 3              | 3              | 5     | 2     | 13   | 29    |                     |               |             |
| Disagree  | 19            | 9              | 16             | 7     | 1     | 43   | 95    |                     |               |             |
| Strongly Disagree   | 10            | 13             | 6              | 4     | 1     | 26   | 60    |                     |               |             |
| No Response   |               |                |                |       |       |      | 48    |                     |               |             |
| Intellectual Achievement<br>of Women Is Viewed As<br>Competitively Aggressive<br>Behavior |               |                |                |       |       |      | 245   | 20                  | 17.00         | 0.65        |
| Strongly Agree  | 3             | 3              | 1              | 3     | 1     | 8    | 19    |                     |               |             |
| Agree   | 11            | 8              | 13             | 4     | 2     | 34   | 72    |                     |               |             |
| Undecided   | 2             | 6              | 0              | 2     | 0     | 8    | 18    |                     |               |             |
| Disagree  | 12            | 8              | 9              | 7     | 1     | 31   | 68    |                     |               |             |
| Strongly Disagree   | 5             | 2              | 2              | 2     | 0     | 6    | 17    |                     |               |             |
| No Response   |               |                |                |       |       |      | 51    |                     |               |             |

Table 19 (Continued)

| Variable and<br>Category                                   | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|--|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|  | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Marriage Is An Asset For<br>Women Administrators           |               |                |                |       |       |      | 245   | 20                  | 12.24         | 0.90        |
| Strongly Agree   | 4             | 2              | 4              | 1     | 0     | 4    | 15    |                     |               |             |
| Agree  | 9             | 8              | 8              | 5     | 2     | 24   | 56    |                     |               |             |
| Undecided  | 9             | 8              | 8              | 6     | 0     | 25   | 56    |                     |               |             |
| Disagree   | 11            | 8              | 4              | 5     | 1     | 29   | 58    |                     |               |             |
| Strongly Disagree  | 1             | 1              | 2              | 1     | 1     | 5    | 11    |                     |               |             |
| No Response  |               |                |                |       |       |      | 49    |                     |               |             |
| Husband's Attitude Toward Your<br>Adm. Career is Favorable |               |                |                |       |       |      | 245   | 20                  | 40.14         | 0.00*       |
| Strongly Agree   | 7             | 8              | 13             | 3     | 0     | 25   | 56    |                     |               |             |
| Agree  | 3             | 5              | 4              | 8     | 0     | 18   | 38    |                     |               |             |
| Undecided  | 5             | 1              | 0              | 1     | 0     | 3    | 10    |                     |               |             |
| Disagree   | 1             | 1              | 0              | 0     | 1     | 4    | 7     |                     |               |             |
| Strongly Disagree  | 1             | 0              | 0              | 1     | 0     | 1    | 3     |                     |               |             |
| No Response (Many Unmarried)                               |               |                |                |       |       |      | 131   |                     |               |             |
| Women Have As Much Need<br>Achievement As Men Do           |               |                |                |       |       |      | 245   | 15                  | 11.50         | 0.71        |
| Strongly Agree   | 25            | 23             | 22             | 12    | 3     | 65   | 150   |                     |               |             |
| Agree  | 8             | 2              | 4              | 6     | 1     | 20   | 41    |                     |               |             |
| Undecided  | 0             | 0              | 0              | 0     | 0     | 0    | 0     |                     |               |             |
| Disagree   | 1             | 2              | 0              | 0     | 0     | 2    | 5     |                     |               |             |
| Strongly Disagree  | 0             | 0              | 0              | 0     | 0     | 2    | 2     |                     |               |             |
| No Response  |               |                |                |       |       |      | 47    |                     |               |             |

\*Statistically significant at .05 level

Table 19 (Continued)

| Variable and<br>Category  | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|---|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|   | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Women Have Difficulty<br>Supervising Men                                      |               |                |                |       |       |      | 245   | 20                  | 12.00         | 0.91        |
| Strongly Agree  | 1             | 1              | 1              | 2     | 0     | 5    | 10    |                     |               |             |
| Agree   | 3             | 3              | 3              | 3     | 2     | 15   | 29    |                     |               |             |
| Undecided   | 5             | 3              | 4              | 2     | 0     | 17   | 31    |                     |               |             |
| Disagree  | 15            | 14             | 12             | 8     | 1     | 36   | 86    |                     |               |             |
| Strongly Disagree   | 10            | 6              | 6              | 3     | 1     | 15   | 41    |                     |               |             |
| No Response   |               |                |                |       |       |      | 48    |                     |               |             |
| Women Have More Difficulty<br>Supervising Other Women<br>Than Supervising Men |               |                |                |       |       |      | 245   | 20                  | 17.35         | 0.62        |
| Strongly Agree  | 3             | 1              | 1              | 2     | 0     | 3    | 10    |                     |               |             |
| Agree   | 5             | 3              | 1              | 2     | 0     | 17   | 28    |                     |               |             |
| Undecided   | 3             | 2              | 2              | 1     | 1     | 15   | 24    |                     |               |             |
| Disagree  | 12            | 16             | 14             | 10    | 2     | 35   | 89    |                     |               |             |
| Strongly Disagree   | 11            | 5              | 7              | 3     | 1     | 18   | 45    |                     |               |             |
| No Response   |               |                |                |       |       |      | 49    |                     |               |             |
| Women Bring Unique Qualities<br>To Administration                             |               |                |                |       |       |      | 245   | 20                  | 45.45         | 0.00*       |
| Strongly Agree  | 10            | 12             | 12             | 8     | 3     | 44   | 89    |                     |               |             |
| Agree   | 14            | 6              | 6              | 6     | 1     | 38   | 71    |                     |               |             |
| Undecided   | 4             | 2              | 7              | 3     | 0     | 2    | 18    |                     |               |             |
| Disagree  | 2             | 7              | 0              | 1     | 0     | 3    | 13    |                     |               |             |
| Strongly Disagree   | 1             | 0              | 1              | 0     | 0     | 0    | 2     |                     |               |             |
| No Response   |               |                |                |       |       |      | 52    |                     |               |             |

\*Statistically significant at .05 level

Table 19 (Continued)

| Variable and<br>Category  | Academic Rank |                |                |       |       |      | Total | Deg.<br>of<br>Free. | Chi<br>Square | p-<br>Value |
|---------------------------|---------------|----------------|----------------|-------|-------|------|-------|---------------------|---------------|-------------|
|                           | Prof.         | Asso.<br>Prof. | Asst.<br>Prof. | Inst. | Lect. | None |       |                     |               |             |
| Satisfied With Adm. Perf. |               |                |                |       |       |      | 245   | 20                  | 28.47         | 0.09        |
| Strongly Agree            | 8             | 6              | 14             | 2     | 2     | 19   | 51    |                     |               |             |
| Agree                     | 19            | 19             | 10             | 10    | 2     | 50   | 110   |                     |               |             |
| Undecided                 | 2             | 1              | 1              | 3     | 0     | 4    | 11    |                     |               |             |
| Disagree                  | 3             | 0              | 1              | 2     | 0     | 12   | 18    |                     |               |             |
| Strongly Disagree         | 1             | 0              | 0              | 0     | 0     | 0    | 1     |                     |               |             |
| No Response               |               |                |                |       |       |      | 54    |                     |               |             |

If married, the respondents indicated their opinions about their husbands' favorable attitudes toward their administrative careers. The contributions of the cells in the contingency table toward the Chi Square value of 40.14 showed that lecturers, those without rank, professors and associate professors were undecided while assistant professors and instructors agreed that the husbands' attitudes were favorable.

Although the remaining ten topics exerted some influence, the statistics indicated that this information was not significant.

When the opinions of the respondents were focused, through contingency tables, on whether women bring unique qualities to administration, it was interesting to note that the greatest contributions to the total Chi Square value of 45.45 were in the responses of associate professors who disagreed and assistant professors who were undecided. In both cases, more than were expected gave those responses.

There was virtually equal distribution among the ranks of the viewpoint of agreement on sex discrimination existing in hiring and promoting; however, more respondents of all ranks demonstrated disagreement.

Categorical Duties Identified by Academic Rank. Only the Chi Square statistic of 43.77 for the respondents identified by rank and 'consulting' was significant at the .05 level, as demonstrated in Table 20. It was not surprising to find that the number of professors involved in consulting duties exceeded the expected number. It was interesting to note that those without academic rank listed consulting duties as fourth among their responsibilities.

Table 20  
 Frequencies of Responses and Chi Square Statistics on  
 Categorical Duties Identified by Academic Rank

| Duties<br>Rank  | Checked<br>Not<br>Ranked | Ranked |    |    |    |   | Total | No<br>Resp. | D.F. | Chi<br>Square | P-<br>Value |
|-----------------|--------------------------|--------|----|----|----|---|-------|-------------|------|---------------|-------------|
|                 |                          | 1      | 2  | 3  | 4  | 5 |       |             |      |               |             |
| Administrative  | 47                       | 121    | 11 | 4  | 2  | 0 | 185   | 60          | 20   | 15.22         | 0.76        |
| Professor       | 4                        | 24     | 2  | 1  | 0  | 0 | 31    |             |      |               |             |
| Associate Prof. | 8                        | 15     | 3  | 2  | 0  | 0 | 28    |             |      |               |             |
| Assistant Prof. | 5                        | 19     | 2  | 0  | 0  | 0 | 26    |             |      |               |             |
| Instructor      | 4                        | 11     | 1  | 0  | 0  | 0 | 16    |             |      |               |             |
| Lecturer        | 2                        | 2      | 0  | 0  | 0  | 0 | 4     |             |      |               |             |
| None            | 24                       | 50     | 3  | 1  | 2  | 0 | 80    |             |      |               |             |
| Teaching        | 5                        | 9      | 46 | 18 | 6  | 2 | 86    | 159         | 25   | 21.70         | 0.65        |
| Professor       | 0                        | 3      | 15 | 7  | 0  | 0 | 25    |             |      |               |             |
| Associate Prof. | 0                        | 2      | 8  | 4  | 0  | 1 | 15    |             |      |               |             |
| Assistant Prof. | 2                        | 2      | 9  | 1  | 3  | 0 | 17    |             |      |               |             |
| Instructor      | 1                        | 1      | 7  | 2  | 1  | 0 | 12    |             |      |               |             |
| Lecturer        | 0                        | 0      | 2  | 0  | 0  | 0 | 2     |             |      |               |             |
| None            | 2                        | 1      | 5  | 4  | 2  | 1 | 15    |             |      |               |             |
| Research        | 5                        | 3      | 17 | 26 | 17 | 3 | 71    | 174         | 20   | 11.45         | 0.93        |
| Professor       | 1                        | 2      | 2  | 9  | 7  | 2 | 23    |             |      |               |             |
| Associate Prof. | 1                        | 1      | 3  | 3  | 2  | 0 | 10    |             |      |               |             |
| Assistant Prof. | 1                        | 0      | 5  | 4  | 3  | 0 | 13    |             |      |               |             |
| Instructor      | 0                        | 0      | 1  | 2  | 1  | 0 | 4     |             |      |               |             |
| Lecturer        | 0                        | 0      | 0  | 0  | 0  | 0 | 0     |             |      |               |             |
| None            | 2                        | 0      | 6  | 8  | 4  | 1 | 21    |             |      |               |             |
| Consulting      | 6                        | 2      | 26 | 22 | 17 | 2 | 75    | 170         | 25   | 43.77         | 0.01*       |
| Professor       | 0                        | 1      | 5  | 4  | 10 | 0 | 20    |             |      |               |             |
| Associate Prof. | 0                        | 0      | 4  | 5  | 3  | 0 | 12    |             |      |               |             |
| Assistant Prof. | 1                        | 0      | 1  | 6  | 2  | 1 | 11    |             |      |               |             |
| Instructor      | 1                        | 0      | 1  | 1  | 2  | 0 | 5     |             |      |               |             |
| Lecturer        | 1                        | 0      | 0  | 0  | 0  | 0 | 1     |             |      |               |             |
| None            | 3                        | 1      | 15 | 6  | 0  | 1 | 26    |             |      |               |             |

\*Statistically significant at .05 level



Table 20

Frequencies of Responses and Chi Square Statistics on  
Categorical Duties Identified by Academic Rank

| Duties<br>Rank  | Checked<br>Not<br>Ranked | Ranked |    |   |   |   | No<br>Total | Resp. | D.F. | Chi<br>Square | -    |
|-----------------|--------------------------|--------|----|---|---|---|-------------|-------|------|---------------|------|
|                 |                          | 1      | 2  | 3 | 4 | 5 |             |       |      |               |      |
| Other           | 7                        | 7      | 16 | 7 | 1 | 7 | 45          | 200   | 20   | 28.77         | 0.09 |
| Professor       | 1                        | 2      | 2  | 3 | 0 | 3 | 11          |       |      |               |      |
| Associate Prof. | 0                        | 1      | 2  | 1 | 0 | 0 | 4           |       |      |               |      |
| Assistant Prof. | 1                        | 0      | 0  | 2 | 1 | 0 | 4           |       |      |               |      |
| Instructor      | 0                        | 0      | 1  | 1 | 0 | 1 | 3           |       |      |               |      |
| Lecturer        | 0                        | 0      | 0  | 0 | 0 | 0 | 0           |       |      |               |      |
| None            | 5                        | 4      | 11 | 0 | 0 | 3 | 23          |       |      |               |      |

Focus on the item 'research' showed that more professors and assistant professors ranked this involvement than did associate professors.

### Salary

The two categories for salaries which were chosen were below \$23,000 and \$23,000 or above. Distributions of respondents within these categories, when identified by each variable, professional experience, duties of the position, biographical background, educational background, attitudes toward the American sex culture and categorical duties, were compared in order to ascertain whether a relationship existed between salary and each variable.

Professional Experience. Twenty questions were presented to each respondent to inquire about her professional work experience background. It was established that ten questions were related to her salary and exerted a significant influence at the time she was queried. Although the others exerted some influence, the statistics indicated that this information was not statistically significant.

The statistically significant values at the .05 level shown in Table 21 made this interesting array: (1) number of positions held, 19.79; (2) age at entry to administrative position, 12.50; (3) number of positions in education after bachelor's degree, 9.93; (4) number of years employed at present institution, 5.66; (5) tenure acquired, 65.92; (6) academic promotions at present institution, 56.69; (7) position description change at present institution, 35.42; (8) method of attaining present position, 22.87; (9) job satisfaction source, 15.50; and (10)

Table 21

Frequencies of Responses and Chi Square Statistics For Women Administrators  
Identified by Salary and Professional Experience

| Variable and Category                      | Salary         |                   | Total | Degrees of Freedom | Chi Square | P-Value |
|--|----------------|-------------------|-------|--------------------|------------|---------|
|  | Below \$23,000 | \$23,000 or above |       |                    |            |         |
| Number of Positions Held                   |                |                   | 245   | 8                  | 19.79      | 0.01*   |
| 1-5  | 130            | 37                | 167   |                    |            |         |
| Over 5                                     | 43             | 29                | 72    |                    |            |         |
| No Response                                |                |                   | 6     |                    |            |         |
| Number of Institutions Served              |                |                   | 245   | 12                 | 13.72      | 0.08    |
| 1-5  | 150            | 61                | 211   |                    |            |         |
| Over 5                                     | 19             | 3                 | 22    |                    |            |         |
| No Response                                |                |                   | 12    |                    |            |         |
| Age At Entry To Administrative Position    |                |                   | 245   | 2                  | 12.50      | 0.00*   |
| Under 20                                   | 6              | 0                 | 6     |                    |            |         |
| 21-35                                      | 124            | 33                | 157   |                    |            |         |
| 36+  | 43             | 30                | 73    |                    |            |         |
| No Response                                |                |                   | 9     |                    |            |         |
| Number of Years Employed Outside Education |                |                   | 245   | 2                  | 5.61       | 0.06    |
| 1-5  | 66             | 20                | 86    |                    |            |         |
| Over 5                                     | 28             | 7                 | 35    |                    |            |         |
| None                                       | 38             | 24                | 62    |                    |            |         |

\*Statistically significant at .05 level

Table 21 (Continued)

| Variable and<br>Category                                    | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|---|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|   | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Number Of Positions In Education After<br>Bachelor's Degree |                   |                      | 245   | 1                        | 9.93          | 0.00*       |
| 1-5   | 112               | 32                   | 144   |                          |               |             |
| Over 5  | 46                | 35                   | 81    |                          |               |             |
| No Response   |                   |                      | 20    |                          |               |             |
| Number of Years Employed At Present Institution             |                   |                      | 245   | 1                        | 5.66          | 0.01*       |
| 1-5   | 70                | 16                   | 86    |                          |               |             |
| Over 5  | 101               | 52                   | 153   |                          |               |             |
| No Response   |                   |                      | 6     |                          |               |             |
| Number of Years In Present Position                         |                   |                      | 245   | 1                        | 0.00          | 0.94        |
| 1-5   | 97                | 37                   | 134   |                          |               |             |
| Over 5  | 74                | 30                   | 104   |                          |               |             |
| No Response   |                   |                      | 7     |                          |               |             |
| Tenure Acquired   |                   |                      | 245   | 1                        | 65.92         | 0.00*       |
| Yes   | 20                | 43                   | 63    |                          |               |             |
| No  | 142               | 21                   | 163   |                          |               |             |
| No Response   |                   |                      | 19    |                          |               |             |

\*Statistically significant at .05 level

Table 21 (Continued)

| Variable and<br>Category                       | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|--|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|  | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Academic Promotions At Present Institution     |                   |                      | 245   | 6                        | 56.69         | 0.00*       |
| Lecturer To Instructor                         | 2                 | 3                    | 5     |                          |               |             |
| Instructor to Assistant Professor              | 15                | 15                   | 30    |                          |               |             |
| Assistant Professor to Associate Professor     | 9                 | 13                   | 22    |                          |               |             |
| Associate Professor to Professor               | 2                 | 4                    | 6     |                          |               |             |
| None   | 104               | 11                   | 115   |                          |               |             |
| Initial Appointment To Administration          | 0                 | 5                    | 5     |                          |               |             |
| Other  | 17                | 10                   | 27    |                          |               |             |
| No Response                                    |                   |                      | 35    |                          |               |             |
| Position Description Change At Present Instit. |                   |                      | 245   | 7                        | 35.42         | 0.00*       |
| Part-time Teaching To Teaching/Administration  | 5                 | 7                    | 12    |                          |               |             |
| Part-time Teaching To Full-time Administration | 2                 | 4                    | 6     |                          |               |             |
| Teaching/Administration To F.T. Administration | 6                 | 8                    | 14    |                          |               |             |
| Full-time Teaching to Teaching/Administration  | 9                 | 6                    | 15    |                          |               |             |
| Full-time Teaching to F.T. Administration      | 5                 | 9                    | 14    |                          |               |             |
| Initial Appointment To Administration          | 2                 | 4                    | 6     |                          |               |             |
| Other  | 35                | 7                    | 42    |                          |               |             |
| None   | 89                | 21                   | 110   |                          |               |             |
| No Response                                    |                   |                      | 26    |                          |               |             |

\*Statistically significant at .05 level

Table 21 (Continued)

| Variable and<br>Category                     | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|--|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|  | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Method of Attaining Present Position         |                   |                      | 265** | 12                       | 22.87         | 0.02*       |
| Sought It As Goal                            | 19                | 6                    | 25    |                          |               |             |
| Applied                                      | 47                | 8                    | 55    |                          |               |             |
| Was Recruited                                | 75                | 44                   | 119   |                          |               |             |
| Inspired By A Woman                          | 12                | 1                    | 13    |                          |               |             |
| Inspired By A Man                            | 22                | 6                    | 28    |                          |               |             |
| Other  | 14                | 9                    | 23    |                          |               |             |
| No Response                                  |                   |                      | 2     |                          |               |             |
| Reason For Having Been Selected              |                   |                      | 266** | 17                       | 16.39         | 0.49        |
| Educational Background                       | 38                | 17                   | 55    |                          |               |             |
| Administrative Community, Political, Volunt. | 7                 | 3                    | 10    |                          |               |             |
| Professional Work Experience                 | 96                | 35                   | 131   |                          |               |             |
| Affirmative Action Requirements              | 7                 | 2                    | 9     |                          |               |             |
| Personality Characteristics                  | 35                | 7                    | 42    |                          |               |             |
| More Than Two Reasons                        | 0                 | 0                    | 0     |                          |               |             |
| Other  | 13                | 2                    | 15    |                          |               |             |
| No Response                                  |                   |                      | 4     |                          |               |             |

\*Statistically significant at .05 level

\*\*Columns total more than 245 because respondents gave multiple responses

Table 21 (Continued)

| Variable and<br>Category                   | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|--|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|  | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Job Satisfaction Source                    |                   |                      | 363** | 5                        | 15.50         | 0.00*       |
| Sense of Achievement                       | 40                | 19                   | 59    |                          |               |             |
| Sense of Affiliation With Prof. Colleagues | 4                 | 3                    | 7     |                          |               |             |
| Sense of Power                             | 0                 | 0                    | 0     |                          |               |             |
| Monetary Rewards                           | 1                 | 1                    | 2     |                          |               |             |
| Humanitarian Service To Students           | 155               | 5                    | 160   |                          |               |             |
| Challenge of Job                           | 59                | 28                   | 87    |                          |               |             |
| Favor Academic Atmosphere                  | 24                | 11                   | 35    |                          |               |             |
| More Than Two Sources Given                | 4                 | 1                    | 5     |                          |               |             |
| Other                                      | 3                 | 2                    | 5     |                          |               |             |
| No Response                                |                   |                      | 3     |                          |               |             |
| Job Aspirations                            |                   |                      | 245   | 5                        | 15.50         | 0.00*       |
| Become Chief Administrator                 | 4                 | 3                    | 7     |                          |               |             |
| Promoted To Another Position               | 62                | 16                   | 78    |                          |               |             |
| Remain In Present Position                 | 61                | 25                   | 86    |                          |               |             |
| Leave Field of Education                   | 22                | 1                    | 23    |                          |               |             |
| Retire                                     | 11                | 8                    | 19    |                          |               |             |
| Other                                      | 16                | 13                   | 29    |                          |               |             |
| No Response                                |                   |                      | 3     |                          |               |             |

\*Statistically significant at .05 level

\*\*Column totals more than 245 because respondents gave multiple responses.

Table 21 (Continued)

| Variable and<br>Category                       | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|--|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|  | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Perceived Constraint Or Barrier to Advancement |                   |                      | 252** | 6                        | 9.02          | 0.17        |
| Sex Discrimination                             | 35                | 10                   | 45    |                          |               |             |
| Remain In Present Locale                       | 26                | 10                   | 36    |                          |               |             |
| Family Responsibilities                        | 19                | 5                    | 24    |                          |               |             |
| Satisfied With Present Position                | 51                | 26                   | 77    |                          |               |             |
| Other  | 42                | 8                    | 50    |                          |               |             |
| No Response                                    |                   |                      | 20    |                          |               |             |
| Strengthening Of Present Position              |                   |                      | 254** | 11                       | 17.50         | 0.09        |
| Broader Administrative Involvement             | 63                | 18                   | 81    |                          |               |             |
| Additional Formal Study                        | 34                | 7                    | 41    |                          |               |             |
| Workshops On Pertinent Topics                  | 16                | 5                    | 21    |                          |               |             |
| Salary Increase                                | 30                | 5                    | 35    |                          |               |             |
| Improved Support System For Collegial Rel.     | 15                | 10                   | 25    |                          |               |             |
| Other  | 20                | 15                   | 35    |                          |               |             |
| No Response                                    |                   |                      | 16    |                          |               |             |
| Strongest Influence On Career Pattern          |                   |                      | 253** | 7                        | 6.40          | 0.49        |
| Professional Work Experience                   | 105               | 41                   | 146   |                          |               |             |
| Biographical Background                        | 12                | 4                    | 16    |                          |               |             |
| Educational Background                         | 41                | 16                   | 57    |                          |               |             |
| American Sex Culture                           | 9                 | 1                    | 10    |                          |               |             |
| Other  | 13                | 2                    | 15    |                          |               |             |
| No Response                                    |                   |                      | 9     |                          |               |             |

\*\*Columns total more than 245 because respondents gave multiple responses.



job aspirations, 15.50

More administrators in the higher salary category than expected had held over five positions. Fewer than expected in the lower salary category had done the same.

The highest contributor to the total Chi Square value for age at entry to administration was found in the \$23,000-plus category where far more respondents than expected by chance had entered administration after attaining age thirty-six. After receiving the bachelor's degree, far more administrators in the higher salary group than expected had held more than five positions in education. They had been employed at the present position for a period of over five years where they had acquired tenure.

A strong contributing force influencing the statistically significant Chi Square value related to academic promotions was seen in the higher salary category whose administrators' initial appointments were made to administrative positions with no changes in position descriptions.

When method of attaining the administrative position was examined, cell by cell in the contingency table, fewer in the higher salary group than expected by chance had been inspired by a man.

Regardless of the category, more respondents had been inspired to enter administration by a man than by another woman. This was especially evident in the lower salary category.

The researcher examined carefully the responses about job satisfaction sources and found that fewer in the top salary group enjoyed humanitarian service to students as did the administrators in the lower salary group. The higher paid women listed the challenge of the

job and a sense of achievement as their prime sources of job satisfaction. This suggests that they are task oriented.

Job aspirations created an interesting set of findings. In the lower salary category, more than expected indicated that they wished to leave the field of educational administration. More in the higher salary group than expected wished to remain in their present positions.

Several of the administrators who were interviewed made additional comments about aspiring to combine their administrative duties with writing. Only three percent of the respondents in both salary groups aspired to become the chief administrator.

Duties of the Position. Table 22 showed that at the .05 level of significance, (1) the decision-making responsibility, 9.22, and (2) chief responsibility, 33.38 are the two items of statistically significant value. It appears that although the administrative officer to whom most of the respondents were responsible was the vice president, the cell of the contingency table contributing the most to the total Chi Square value was found in the fact that more high salaried respondents than expected by chance report directly to the president or chancellor. Additionally, the most often designated chief responsibility was concentrated under student affairs. Academic affairs ranked second; however, responsibility for personnel affairs by the subjects in the higher salary group contributed most to the Chi Square value.

Table 22

Frequencies of Responses and Chi Square Statistics For Women Administrators  
Identified by Salary and Duties of the Position

| Variable and<br>Category                      | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | P-<br>Value |
|---|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|   | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Decision-making Responsibility                |                   |                      | 245   | 3                        | 9.22          | 0.02*       |
| Responsible Directly To Governing Board       | 0                 | 1                    | 1     |                          |               |             |
| Responsible Directly To President, Chancellor | 21                | 15                   | 36    |                          |               |             |
| Responsible Directly To V. Pres., Chancellor  | 79                | 32                   | 111   |                          |               |             |
| Responsible To One Other Than Above           | 61                | 14                   | 75    |                          |               |             |
| No Response                                   |                   |                      | 22    |                          |               |             |
| Chief Responsibility                          |                   |                      | 267** | 8                        | 33.38         | 0.00*       |
| Responsible For Personnel Affairs             | 15                | 12                   | 27    |                          |               |             |
| Responsible For Fiscal Affairs                | 12                | 3                    | 15    |                          |               |             |
| Responsible For Academic Affairs              | 21                | 13                   | 34    |                          |               |             |
| Responsible For Physical Affairs              | 0                 | 1                    | 1     |                          |               |             |
| Responsible For Student Affairs               | 37                | 13                   | 50    |                          |               |             |
| No Response                                   |                   |                      | 140   |                          |               |             |
| Monitor Policy Implementation                 |                   |                      | 245   | -                        | -             | -           |
| Yes   | 49                | 26                   | 75    |                          |               |             |
| No Response                                   |                   |                      | 170   |                          |               |             |

\*Statistically significant at .05 level

\*\*Column totals more than 245 because respondents gave multiple responses.

Table 22 (Continued)

| Variable and<br>Category            | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|-------------------------------------|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|                                     | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Communicate Decisions By Supervisor |                   |                      | 245   | -                        | -             | -           |
| Yes                                 | 45                | 18                   | 63    |                          |               |             |
| No Response                         |                   |                      | 182   |                          |               |             |
| Delegate Authority To Subordinates  |                   |                      | 245   | -                        | -             | -           |
| Yes                                 | 60                | 30                   | 90    |                          |               |             |
| No Response                         |                   |                      | 155   |                          |               |             |

Biographical Background. The information request contained ten questions about biographical background. It was found that two questions were related to salary and they exerted a significant influence on the respondents at the time they were interrogated. Although the others exerted some influence, the statistics indicated that the information was not significant.

As shown in Table 23, the responses (1) age range, 16.09; and (2) number of children, 11.32 were statistically significant at the .05 level. Within the age range cells, the largest number was concentrated under age range 45-54 in the higher salary category. The next higher number fell in the range 35-44, also in the higher salary category. Fewer than expected in the higher salary group were in the 25-34 age range.

There existed a consistent pattern in birth order which reflected the fact that the respondents were first-born children, especially those in the lower salary category.

In the upper salary group, more than expected had two children.

Educational Background. To measure the influence on salary reflected by educational background, two broad questions were presented. The subjects were asked questions about the colleges from which they graduated, the degrees acquired, the financial support of the colleges and the ages at which degrees were conferred. The computed Chi Square statistics shown in Table 24 reflected statistical significance at the .05 level for the items (1) first degree earned, 8.29; (2) age first degree earned, 7.66; (3) second degree earned, 8.58; and (4) support of fourth

Table 23

Frequencies of Responses and Chi Square Statistics For Women Administrators  
Identified by Salary and Biographical Background

| Variable and<br>Category | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | P-<br>Value |
|--------------------------|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|                          | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Age Range                |                   |                      | 245   | 5                        | 16.09         | 0.00*       |
| 24 Or Under              | 4                 | 0                    | 4     |                          |               |             |
| 25 - 34                  | 45                | 6                    | 51    |                          |               |             |
| 35 - 44                  | 49                | 13                   | 62    |                          |               |             |
| 45 - 54                  | 50                | 28                   | 78    |                          |               |             |
| 55 - 64                  | 24                | 17                   | 41    |                          |               |             |
| 65 Or Above              | 3                 | 1                    | 4     |                          |               |             |
| No Response              |                   |                      | 5     |                          |               |             |
| Birth Order              |                   |                      | 245   | 2                        | 1.41          | 0.49        |
| 1                        | 81                | 31                   | 112   |                          |               |             |
| 2                        | 39                | 19                   | 58    |                          |               |             |
| 3+                       | 41                | 12                   | 53    |                          |               |             |
| No Response              |                   |                      | 22    |                          |               |             |
| Family Size              |                   |                      | 245   | 1                        | 0.56          | 0.45        |
| 1-5                      | 109               | 33                   | 142   |                          |               |             |
| More Than Five           | 27                | 12                   | 39    |                          |               |             |
| No Response              |                   |                      | 64    |                          |               |             |

\* Statistically significant at .05 level

Table 23 (Continued)

| Variable and<br>Category  | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|---------------------------|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|                           | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Marital Status            |                   |                      | 245   | 5                        | 1.35          | 0.92        |
| Single                    | 54                | 22                   | 76    |                          |               |             |
| Married                   | 86                | 30                   | 116   |                          |               |             |
| Widowed                   | 8                 | 4                    | 12    |                          |               |             |
| Separated                 | 4                 | 2                    | 6     |                          |               |             |
| Divorced                  | 15                | 7                    | 22    |                          |               |             |
| Remarried                 | 6                 | 1                    | 7     |                          |               |             |
| No Response               |                   |                      | 6     |                          |               |             |
| Husband's Occupation      |                   |                      | 245   | 7                        | 6.03          | 0.53        |
| No Husband                | 63                | 25                   | 88    |                          |               |             |
| Education                 | 28                | 13                   | 41    |                          |               |             |
| Business                  | 28                | 7                    | 35    |                          |               |             |
| Professional              | 19                | 8                    | 27    |                          |               |             |
| Business and Professional | 1                 | 1                    | 2     |                          |               |             |
| Farmer                    | 1                 | 0                    | 1     |                          |               |             |
| Government                | 3                 | 2                    | 5     |                          |               |             |
| Other                     | 14                | 1                    | 15    |                          |               |             |
| No Response               |                   |                      | 31    |                          |               |             |

Table 23 (Continued)

| Variable and<br>Category   | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|----------------------------|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|                            | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Number Of Children         |                   |                      | 245   | 5                        | 11.32         | 0.04*       |
| None                       | 84                | 21                   | 105   |                          |               |             |
| One                        | 20                | 12                   | 32    |                          |               |             |
| Two                        | 29                | 17                   | 46    |                          |               |             |
| Three                      | 18                | 7                    | 25    |                          |               |             |
| Four                       | 7                 | 0                    | 7     |                          |               |             |
| Five                       | 0                 | 0                    | 0     |                          |               |             |
| Six                        | 5                 | 0                    | 5     |                          |               |             |
| Seven Plus                 | 0                 | 0                    | 0     |                          |               |             |
| No Response                |                   |                      | 25    |                          |               |             |
| Age Groups Of Children     |                   |                      | 253** | 8                        | 7.15          | 0.51        |
| 1 - 5                      | 11                | 2                    | 13    |                          |               |             |
| 6 -10                      | 10                | 3                    | 13    |                          |               |             |
| 11 -15                     | 24                | 8                    | 32    |                          |               |             |
| 16 -20                     | 21                | 9                    | 30    |                          |               |             |
| 21+                        | 24                | 14                   | 38    |                          |               |             |
| No Response                |                   |                      | 127   |                          |               |             |
| Amount Of Military Service |                   |                      | 245   | 1                        | 1.23          | 0.26        |
| None                       | 155               | 58                   | 213   |                          |               |             |
| One Year                   | 0                 | 0                    | 0     |                          |               |             |
| More Than One Year         | 2                 | 3                    | 5     |                          |               |             |
| No Response                |                   |                      | 27    |                          |               |             |

\*Statistically significant at .05 level

\*\*Column totals more than 245 because respondents gave multiple responses.



Table 23 (Continued)

| Variable and<br>Category        | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|---------------------------------|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|                                 | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Military Occupational Specialty |                   |                      | 245   |                          |               | 0.64***     |
| Administrative                  | 5                 | 1                    | 6     |                          |               |             |
| Other                           | 0                 | 2                    | 2     |                          |               |             |
| No Response                     |                   |                      | 237   |                          |               |             |
| Mother's Education              |                   |                      | 245   | 4                        | 1.15          | 0.88        |
| Less Than High School           | 33                | 16                   | 49    |                          |               |             |
| High School                     | 63                | 23                   | 86    |                          |               |             |
| Post High School                | 24                | 7                    | 31    |                          |               |             |
| College                         | 40                | 14                   | 54    |                          |               |             |
| Advanced Study                  | 12                | 5                    | 17    |                          |               |             |
| No Response                     |                   |                      | 8     |                          |               |             |
| Mother's Highest Degree         |                   |                      | 245   | 4                        | 3.72          | 0.44        |
| Associate                       | 2                 | 0                    | 2     |                          |               |             |
| Bachelor's                      | 15                | 6                    | 21    |                          |               |             |
| Master's                        | 6                 | 3                    | 9     |                          |               |             |
| Doctorate                       | 0                 | 0                    | 1     |                          |               |             |
| Honorary Doctorate              | 1                 | 0                    | 1     |                          |               |             |
| Medical Doctorate               | 0                 | 1                    | 1     |                          |               |             |
| No Response                     |                   |                      | 211   |                          |               |             |

\*\*\*Fisher's Exact Test

Table 23 (Continued)

| Variable and<br>Category | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|--------------------------|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|                          | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Father's Education       |                   |                      | 245   | 4                        | 5.06          | 0.28        |
| Less Than High School    | 38                | 19                   | 57    |                          |               |             |
| High School              | 51                | 12                   | 63    |                          |               |             |
| Post High School         | 23                | 6                    | 29    |                          |               |             |
| College                  | 39                | 18                   | 57    |                          |               |             |
| Advanced Study           | 19                | 10                   | 29    |                          |               |             |
| No Response              |                   |                      | 10    |                          |               |             |
| Father's Highest Degree  |                   |                      | 245   | 5                        | 5.51          | 0.35        |
| Associate                | 1                 | 0                    | 1     |                          |               |             |
| Bachelor's               | 8                 | 4                    | 12    |                          |               |             |
| Master's                 | 11                | 3                    | 14    |                          |               |             |
| Doctorate                | 1                 | 3                    | 4     |                          |               |             |
| Honorary Doctorate       | 1                 | 0                    | 1     |                          |               |             |
| Medical Doctorate        | 2                 | 2                    | 4     |                          |               |             |
| No Response              |                   |                      | 209   |                          |               |             |
| Mother's Occupation      |                   |                      | 245   | 3                        | 1.34          | 0.71        |
| Homemaker                | 100               | 35                   | 135   |                          |               |             |
| Business                 | 26                | 9                    | 35    |                          |               |             |
| Professional             | 24                | 13                   | 37    |                          |               |             |
| Other                    | 20                | 7                    | 27    |                          |               |             |
| No Response              |                   |                      | 11    |                          |               |             |

Table 23 (Continued)

| Variable and<br>Category  | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|---------------------------|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|                           | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Father's Occupation       |                   |                      | 245   | 4                        | 8.11          | 0.08        |
| Homemaker                 | 1                 | 1                    | 2     |                          |               |             |
| Business                  | 84                | 25                   | 109   |                          |               |             |
| Professional              | 29                | 19                   | 48    |                          |               |             |
| Business and Professional | 0                 | 1                    | 1     |                          |               |             |
| Other                     | 58                | 19                   | 77    |                          |               |             |
| No Response               |                   |                      | 8     |                          |               |             |

Table 24

Frequencies of Responses and Chi Square Statistics For Women Administrators

Identified by Salary and Educational Background

| Variable and Category        | Salary         |                   | Total | Degrees of Freedom | Chi Square | P-Value |
|------------------------------|----------------|-------------------|-------|--------------------|------------|---------|
|                              | Below \$23,000 | \$23,000 or above |       |                    |            |         |
| Support of First Institution |                |                   | 245   | 1                  | 0.70       | 0.39    |
| Public                       | 87             | 37                | 124   |                    |            |         |
| Private                      | 85             | 27                | 112   |                    |            |         |
| No Response                  |                |                   | 9     |                    |            |         |
| First Degree Earned          |                |                   | 245   | 3                  | 8.29       | 0.04*   |
| Associate                    | 13             | 2                 | 15    |                    |            |         |
| Bachelor's                   | 149            | 56                | 205   |                    |            |         |
| Master's                     | 1              | 3                 | 4     |                    |            |         |
| Registered Nurse             | 1              | 2                 | 3     |                    |            |         |
| No Response                  |                |                   | 18    |                    |            |         |
| Age First Degree Earned      |                |                   | 245   | 2                  | 7.66       | 0.02*   |
| Under 20                     | 37             | 26                | 63    |                    |            |         |
| 21-35                        | 125            | 37                | 162   |                    |            |         |
| 36-50                        | 3              | 1                 | 4     |                    |            |         |
| 51+                          | 0              | 0                 | 0     |                    |            |         |
| No Response                  |                |                   | 16    |                    |            |         |

\*Statistically significant at .05 level

Table 24 (Continued)

| Variable and<br>Category      | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|-------------------------------|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|                               | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Support of Second Institution |                   |                      | 245   | 1                        | 2.93          | 0.08        |
| Public                        | 90                | 34                   | 124   |                          |               |             |
| Private                       | 34                | 24                   | 58    |                          |               |             |
| No Response                   |                   |                      | 63    |                          |               |             |
| Second Degree Earned          |                   |                      | 245   | 3                        | 8.58          | 0.03*       |
| Bachelor's                    | 21                | 10                   | 31    |                          |               |             |
| Master's                      | 98                | 43                   | 141   |                          |               |             |
| Doctorate                     | 0                 | 2                    | 2     |                          |               |             |
| Medical Doctorate             | 0                 | 2                    | 2     |                          |               |             |
| No Response                   |                   |                      | 69    |                          |               |             |
| Age Second Degree Earned      |                   |                      | 245   | 3                        | 5.44          | 0.14        |
| Under 20                      | 2                 | 3                    | 5     |                          |               |             |
| 21-35                         | 94                | 48                   | 142   |                          |               |             |
| 36-50                         | 21                | 4                    | 25    |                          |               |             |
| 51+                           | 1                 | 0                    | 1     |                          |               |             |
| No Response                   |                   |                      | 72    |                          |               |             |
| Support of Third Institution  |                   |                      | 245   | 1                        | 0.14          | 0.70        |
| Public                        | 30                | 26                   | 56    |                          |               |             |
| Private                       | 18                | 20                   | 38    |                          |               |             |
| No Response                   |                   |                      | 151   |                          |               |             |

\*Statistically significant at .05 level

Table 24 (Continued)

| Variable and<br>Category      | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|-------------------------------|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|                               | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Third Degree Earned           |                   |                      | 245   | 3                        | 4.83          | 0.18        |
| Bachelor's                    | 0                 | 1                    | 1     |                          |               |             |
| Master's                      | 17                | 9                    | 26    |                          |               |             |
| Doctorate                     | 24                | 33                   | 57    |                          |               |             |
| Honorary Doctorate            | 1                 | 1                    | 2     |                          |               |             |
| No Response                   |                   |                      | 159   |                          |               |             |
| Age Third Degree Earned       |                   |                      | 245   | 2                        | 2.99          | 0.22        |
| Under 20                      | 0                 | 0                    | 0     |                          |               |             |
| 21-35                         | 27                | 22                   | 49    |                          |               |             |
| 36-50                         | 13                | 20                   | 33    |                          |               |             |
| 51+                           | 3                 | 1                    | 4     |                          |               |             |
| No Response                   |                   |                      | 159   |                          |               |             |
| Support of Fourth Institution |                   |                      | 245   |                          |               | 0.01***     |
| Public                        | 8                 | 4                    | 12    |                          |               |             |
| Private                       | 1                 | 8                    | 9     |                          |               |             |
| No Response                   |                   |                      | 224   |                          |               |             |

\*\*\*Fisher's Exact Test

Table 24 (Continued)

| Variable and<br>Category | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|--------------------------|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|                          | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Fourth Degree Earned     |                   |                      | 245   | 3                        | 5.29          | 0.15        |
| Master's                 | 3                 | 0                    | 3     |                          |               |             |
| Doctorate                | 5                 | 7                    | 12    |                          |               |             |
| Honorary Doctorate       | 0                 | 1                    | 1     |                          |               |             |
| Medical Doctorate        | 0                 | 1                    | 1     |                          |               |             |
| No Response              |                   |                      | 228   |                          |               |             |
| Age Fourth Degree Earned |                   |                      | 245   | 2                        | 1.53          | 0.46        |
| 21-35                    | 4                 | 7                    | 11    |                          |               |             |
| 36-50                    | 4                 | 5                    | 9     |                          |               |             |
| 51+                      | 1                 | 0                    | 1     |                          |               |             |
| No Response              |                   |                      | 224   |                          |               |             |

institution, Fisher's Exact Test, 0.01.

The number of administrators receiving more than \$23,000 who had acquired their first degrees before age twenty-one exceeded expectations.

Attitudes Toward The American Sex Culture. Because of contemporary legislation dealing with women's rights and the prevalence of concentration on the circumstance of women, twelve related questions were asked each respondent. It was found that two questions were related to her salary and exerted a significant influence at that time. Although there was high enthusiasm for the others, the statistics indicated that this information was not statistically significant.

According to Table 25, the computed Chi Square statistics revealed significance at the .05 level for (1) women have difficulty supervising men, 15.51; and (2) women bring unique qualities to administration, 13.20. With regard to difficulty in supervising men, the 'agree' responses greatly outnumbered the responses which disagreed with the statement; however, more higher salaried respondents than expected were undecided on this statement. In examining the opinion that women bring unique qualities to administration, a revealing result was noted. The frequency of 'agree' responses outnumbered other responses but the number of respondents with salaries over \$23,000 who disagreed actually exceeded the number expected by chance.

Categorical Duties Identified by Salary. The results demonstrated in Table 26 revealed that 'consulting,' 13.81, was the only statistically significant duty. The lower salary category ranked it high more often than the salary category above \$23,000.



Table 25

## Frequencies of Responses and Chi Square Statistics For Women Administrators

Identified by Salary and Attitudes Toward the American Sex Culture

| Variable and<br>Category  | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | P-<br>Value |
|---|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|   | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Sex Discrimination In Hiring and Promoting<br>At Present Institution        |                   |                      | 245   | 4                        | 2.43          | 0.65        |
| Strongly Agree  | 21                | 4                    | 25    |                          |               |             |
| Agree   | 36                | 15                   | 51    |                          |               |             |
| Undecided   | 13                | 7                    | 20    |                          |               |             |
| Disagree  | 59                | 24                   | 83    |                          |               |             |
| Strongly Disagree   | 42                | 15                   | 57    |                          |               |             |
| No Response   |                   |                      | 9     |                          |               |             |
| Adverse Effect on Position Caused by<br>Legislation Treating Discrimination |                   |                      | 245   | 4                        | 6.10          | 0.19        |
| Strongly Agree  | 3                 | 0                    | 3     |                          |               |             |
| Agree   | 7                 | 2                    | 9     |                          |               |             |
| Undecided   | 28                | 5                    | 33    |                          |               |             |
| Disagree  | 84                | 33                   | 117   |                          |               |             |
| Strongly Disagree   | 47                | 26                   | 73    |                          |               |             |
| No Response   |                   |                      | 10    |                          |               |             |

Table 25 (Continued)

| Variable and<br>Category  | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|---|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|   | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| <b>Adverse Effect on Co-workers' Attitude<br/>Caused By Contemporary Legal Structure</b>    |                   |                      | 245   | 4                        | 5.35          | 0.25        |
| Strongly Agree  | 1                 | 0                    | 1     |                          |               |             |
| Agree   | 14                | 3                    | 17    |                          |               |             |
| Undecided   | 26                | 8                    | 34    |                          |               |             |
| Disagree  | 84                | 28                   | 112   |                          |               |             |
| Strongly Disagree   | 45                | 27                   | 72    |                          |               |             |
| No Response   |                   |                      | 9     |                          |               |             |
| <b>Intellectual Achievement of Women Is Viewed<br/>As Competitively Aggressive Behavior</b> |                   |                      | 245   | 4                        | 5.96          | 0.20        |
| Strongly Agree  | 18                | 6                    | 24    |                          |               |             |
| Agree   | 71                | 17                   | 88    |                          |               |             |
| Undecided   | 14                | 6                    | 20    |                          |               |             |
| Disagree  | 54                | 24                   | 78    |                          |               |             |
| Strongly Disagree   | 14                | 10                   | 24    |                          |               |             |
| No Response   |                   |                      | 11    |                          |               |             |
| <b>Marriage is an Asset for Women Administrators</b>  |                   |                      | 245   | 4                        | 0.13          | 0.99        |
| Strongly Agree  | 13                | 6                    | 19    |                          |               |             |
| Agree   | 46                | 18                   | 64    |                          |               |             |
| Undecided   | 50                | 19                   | 69    |                          |               |             |
| Disagree  | 50                | 19                   | 69    |                          |               |             |
| Strongly Disagree   | 10                | 4                    | 14    |                          |               |             |
| No Response   |                   |                      | 10    |                          |               |             |

Table 25 (Continued)

| Variable and<br>Category   | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|--|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|  | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Husband's Attitude Toward Your Administrative<br>Career is Favorable |                   |                      | 245   | 4                        | 5.36          | 0.25        |
| Strongly Agree   | 52                | 20                   | 72    |                          |               |             |
| Agree  | 36                | 11                   | 47    |                          |               |             |
| Undecided  | 5                 | 6                    | 11    |                          |               |             |
| Disagree   | 7                 | 1                    | 8     |                          |               |             |
| Strongly Disagree  | 2                 | 1                    | 3     |                          |               |             |
| No Response (Many Unmarried)   |                   |                      | 104   |                          |               |             |
| Women Have as Much Need Achievement<br>as Men Do                     |                   |                      | 245   | 3                        | 1.08          | 0.78        |
| Strongly Agree   | 134               | 48                   | 182   |                          |               |             |
| Agree  | 34                | 14                   | 48    |                          |               |             |
| Undecided  | 0                 | 0                    | 0     |                          |               |             |
| Disagree   | 3                 | 2                    | 5     |                          |               |             |
| Strongly Disagree  | 1                 | 1                    | 2     |                          |               |             |
| No Response  |                   |                      | 8     |                          |               |             |
| Women Have Difficulty Supervising Men                                |                   |                      | 245   | 4                        | 15.51         | 0.00*       |
| Strongly Agree   | 12                | 2                    | 14    |                          |               |             |
| Agree  | 35                | 4                    | 39    |                          |               |             |
| Undecided  | 28                | 5                    | 33    |                          |               |             |
| Disagree   | 63                | 37                   | 100   |                          |               |             |
| Strongly Disagree  | 33                | 18                   | 51    |                          |               |             |
| No Response  |                   |                      | 8     |                          |               |             |

\*Statistically significant at .05 level

Table 25 (Continued)

| Variable and<br>Category   | Salary            |                      | Total | Degrees<br>of<br>Freedom | Chi<br>Square | p-<br>Value |
|--|-------------------|----------------------|-------|--------------------------|---------------|-------------|
|  | Below<br>\$23,000 | \$23,000<br>or above |       |                          |               |             |
| Women Have More Difficulty Supervising<br>Other Women Than Supervising Men |                   |                      | 245   | 4                        | 5.56          | 0.23        |
| Strongly Agree   | 10                | 2                    | 12    |                          |               |             |
| Agree  | 27                | 8                    | 35    |                          |               |             |
| Undecided  | 25                | 4                    | 29    |                          |               |             |
| Disagree   | 76                | 33                   | 109   |                          |               |             |
| Strongly Disagree  | 34                | 18                   | 52    |                          |               |             |
| No Response  |                   |                      | 8     |                          |               |             |
| Women Bring Unique Qualities to Administration                             |                   |                      | 245   | 4                        | 13.20         | 0.01*       |
| Strongly Agree   | 85                | 20                   | 105   |                          |               |             |
| Agree  | 68                | 24                   | 92    |                          |               |             |
| Undecided  | 12                | 9                    | 21    |                          |               |             |
| Disagree   | 6                 | 8                    | 14    |                          |               |             |
| Strongly Disagree  | 1                 | 1                    | 2     |                          |               |             |
| No Response  |                   |                      | 11    |                          |               |             |
| Satisfied With Administrative Performance                                  |                   |                      | 245   | 4                        | 6.42          | 0.16        |
| Strongly Agree   | 43                | 18                   | 61    |                          |               |             |
| Agree  | 96                | 39                   | 135   |                          |               |             |
| Undecided  | 12                | 3                    | 15    |                          |               |             |
| Disagree   | 18                | 2                    | 20    |                          |               |             |
| Strongly Disagree  | 0                 | 1                    | 1     |                          |               |             |
| No Response  |                   |                      | 13    |                          |               |             |

\*Statistically significant at .05 level

Table 26  
 Frequencies of Responses and Chi Square Statistics on  
 Categorical Duties Identified by Salary

| Duties<br>Salary  | Checked<br>Not<br>Ranked | Ranked |    |    |    |   | Total | No<br>Resp. | D.F. | Chi<br>Square | P-<br>Value |
|-------------------|--------------------------|--------|----|----|----|---|-------|-------------|------|---------------|-------------|
|                   |                          | 1      | 2  | 3  | 4  | 5 |       |             |      |               |             |
| Administrative    | 64                       | 140    | 11 | 6  | 2  | 1 | 224   | 21          | 5    | 7.80          | 0.16        |
| Below \$23,000    | 49                       | 94     | 11 | 4  | 2  | 1 | 161   |             |      |               |             |
| \$23,000 or above | 15                       | 46     | 0  | 2  | 0  | 0 | 63    |             |      |               |             |
| Teaching          | 5                        | 8      | 50 | 20 | 6  | 2 | 91    | 154         | 5    | 6.41          | 0.26        |
| Below \$23,000    | 4                        | 6      | 27 | 12 | 6  | 1 | 56    |             |      |               |             |
| \$23,000 or above | 1                        | 2      | 23 | 8  | 0  | 1 | 35    |             |      |               |             |
| Research          | 6                        | 3      | 21 | 29 | 19 | 3 | 81    | 164         | 5    | 4.84          | 0.43        |
| Below \$23,000    | 4                        | 1      | 16 | 16 | 10 | 1 | 48    |             |      |               |             |
| \$23,000 or above | 2                        | 2      | 5  | 13 | 9  | 2 | 33    |             |      |               |             |
| Consulting        | 8                        | 4      | 32 | 22 | 18 | 2 | 86    | 159         | 5    | 13.81         | 0.01*       |
| Below \$23,000    | 8                        | 2      | 21 | 14 | 5  | 1 | 51    |             |      |               |             |
| \$23,000 or above | 0                        | 2      | 11 | 8  | 13 | 1 | 35    |             |      |               |             |
| Other             | 7                        | 8      | 17 | 10 | 2  | 7 | 51    | 194         | 5    | 2.41          | 0.78        |
| Below \$23,000    | 5                        | 7      | 13 | 7  | 1  | 4 | 37    |             |      |               |             |
| \$23,000 or above | 2                        | 1      | 4  | 3  | 1  | 3 | 14    |             |      |               |             |

\*Statistically significant at .05 level

Summary

Examination of the responses to the information request resulted in some statistically significant findings. The instrument contained forty-nine questions. Twenty-two (45%) of these questions were found to be statistically significant forty-four times when identified by the three classifications, position, rank, and salary. Table 27 contains a recapitulation of these significant findings. These results were summarized and compared with other similar studies to establish conclusions and recommendations in Chapter 5.

Table 27

Summary of Statistically Significant Differences Identified By  
Position, Academic Rank, and Salary

| <u>Variable</u>                                       | <u>Chi Square</u> |
|---|-------------------|
| <u>Position</u>                                       |                   |
| 1. Number of Years Employed Outside of Education      | 7.19              |
| 2. Tenure Acquired                                    | 7.64              |
| 3. Academic Promotions at Present Institution         | 20.11             |
| 4. Position Description Change At Present Institution | 18.10             |
| 5. Present Annual Salary                              | 31.10             |
| 6. Decision-Making Responsibility                     | 32.75             |
| 7. Chief Responsibility                               | 17.16             |
| 8. Father's Occupation                                | 17.76             |
| 9. Women Have Difficulty Supervising Men              | 12.82             |
| 10. Teaching  | 11.88             |
| <u>Academic Rank</u>                                  |                   |
| 1. Age At Entry To An Administrative Position         | 32.85             |
| 2. Number of Years At Present Institution             | 14.88             |
| 3. Tenure Acquired                                    | 14.72             |
| 4. Academic Promotions At Present Institution         | 21.99             |
| 5. Position Description Change At Present Institution | 76.39             |
| 6. Present Annual Salary                              | 134.65            |

Table 27 (Continued)

| Variable  | Chi Square |
|---|------------|
| <u>Academic Rank, Continued</u>                         |            |
| 7. Chief Responsibility                                 | 89.80      |
| 8. Age Range  | 47.85      |
| 9. Marital Status                                       | 47.03      |
| 10. First Degree Earned                                 | 26.30      |
| 11. Age At Which The First Degree Was Earned            | 22.39      |
| 12. Husband's Attitude Toward Your Career Is Favorable  | 40.14      |
| 13. Women Bring Unique Qualities To Administration      | 45.45      |
| 14. Consulting  | 43.77      |
| <u>Salary</u>   |            |
| 1. Number of Positions Held                             | 19.79      |
| 2. Age At Entry To Administrative Position              | 12.50      |
| 3. Number of Positions In Educ. After Bachelor's Degree | 9.93       |
| 4. Number of Years Employed At Present Institution      | 5.66       |
| 5. Tenure Acquired                                      | 65.92      |
| 6. Academic Promotions At Present Institution           | 56.69      |
| 7. Position Description Change At Present Institution   | 35.42      |
| 8. Method of Attaining Present Position                 | 22.87      |
| 9. Job Satisfaction Source                              | 15.50      |
| 10. Job Aspirations                                     | 15.50      |
| 11. Decision-Making Responsibility                      | 9.22       |
| 12. Chief Responsibility                                | 33.38      |
| 13. Age Range   | 16.09      |
| 14. Number of Children                                  | 11.32      |
| 15. First Degree Earned                                 | 8.29       |
| 16. Age First Degree Earned                             | 7.66       |
| 17. Second Degree Earned                                | 8.58       |
| 18. Support of Fourth Institution                       | 0.01***    |
| 19. Women Have Difficulty Supervising Men               | 15.51      |
| 20. Women Bring Unique Qualities To Administration      | 13.20      |

---

Total: 44

\*\*\*Fisher's Exact Test

### Impressions Gleaned From Informal Personal Interviews

Informal personal interviews with women administrators were conducted for the purpose of having them serve as a corroborative medium to supplement the data secured from the information request. Throughout the interviews, there was strong evidence of similarity between responses on the instrument and the conversations of administrators believed to be included in the various categories of the present study.

In addition to advice to potential administrators, those persons who were interviewed discussed quite candidly and realistically the topics which were introduced to them (see Appendix B).

There was agreement that more women are needed in administrative positions, but the administrators indicated that so many women fail to project their career plans to include management or administration in their preparation.

The most popular catalyst suggested for advancement by women administrators seemed to be consciousness by male administrators that women also can be effective administrators. It was interesting to note that male chauvinism, not sex discrimination, was the prevailing reference to barriers to advancement. Those interviewed indicated that chauvinism appears to be more subtle and unconscious than overt sex discrimination, but the results are equally devastating.

In comparing the present with the past, there tended to be optimism about present opportunities for women to hold administrative positions.

With regard to behavior on the job, the persons interviewed suggested that behavior is a reflection of morale. If the position shows promise of advancement while it meets current personal needs, their



behavior is more positive.

Those administrators who were queried about re-casting their career patterns seemed to concentrate their interests along the line of having prepared for and sought administrative positions at an earlier age. On the other hand, their responses showed respect for the experiences which had enhanced their preparation.

There appeared to be a void in the awareness by these women of the need to have them encourage, support and endorse other women capable of seeking or holding administrative positions.

The interviews showed mixed reactions to the future status of women administrators in higher education. The negative responses focused on nationally predicted reductions in college enrollments which usually result in retaining male administrators and releasing women. On the positive side, the women suggested that now that the door to administration has been opened, together with the prevailing national climate of protest and litigation, women will continue to represent increased numbers on administrative staffs in all levels of education.

This phase of the research satisfied the purpose of corroborating the information secured from the instrument. Similar themes and agreement about the characteristics and career patterns were found. After completing ten interviews, the researcher concluded that additional interviews would probably not provide new insights since the information presented fell into patterns with which the researcher was already familiar.

## CHAPTER V

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary and Conclusions

The present study was conducted for the purpose of identifying the major variables believed to be instrumental in influencing the positions, academic ranks and salaries of women administrators in North Carolina senior colleges and universities. The variables found to be influential included (a) professional work experience, (b) duties of the position, (c) biographical background, (d) educational background, and (e) attitudes toward the American sex culture. Responses on the components of each of these items were considered in relation to three logical educational administration variables, namely position, academic rank, and salary. To facilitate Chi Square computations, position and salary were each classified in two general, reduced categories. The questions about the relationships between the key items and position, academic rank and salary were summarized in Table 27. The only sub-division which showed no significant differences was the distribution of respondents identified by position in relationship with educational background.

The findings of the study had the following effect on the research hypotheses:

Hypothesis 1

On the question of whether these women consider themselves to be discriminated against, this hypothesis was supported by the data when

grouped in each of the variables, position, academic rank and salary. Among the stipulated barriers to advancement as perceived by the women administrators, sex discrimination received the highest number of responses. An extremely high number of respondents indicated satisfaction with their present jobs and demonstrated their desire to remain in their present locale; nevertheless, sex discrimination was viewed as a barrier.

### Hypothesis 2

On the question of whether some key factors which impede advancement were cultural prejudices, culturally defined roles for women, or cultural barriers and sexism, the researcher interpreted some of the items on the information request as follows:

Number of Years Employed at Present Institution. Women are accused of short-term employment periods; hence, they are considered to be bad risks for administrative training. The present study found that the administrators have remained beyond five years at their present positions, and few have had work experience outside of education.

Tenure Acquired. Although the present study made no comparisons between male and female administrators, other studies which were reviewed showed that the percentage of men holding tenure exceeds that of women. The present study found that more than twice as many respondents did not have tenure than those who had acquired tenure.

Sense of Achievement. A popular assumption suggests that women do not have the need to achieve which drives many men toward success. The reason most often given is that women view their jobs as being supplementary; hence, lack of designation of a career results. The findings of the present study negated this myth because the respondents showed a marked respect

for the need for achievement by women.

Job Aspirations. It has been noted that low job aspiration levels are often attributed to women but the reasons are seldom analyzed. The findings of this study revealed a high percentage of the administrators satisfied with their present positions and desirous of remaining in their present locales.

Responses to Some Issues of the American Sex Culture. The extent to which diversity exists among the respondents in the study is reflected in Tables 13, 19, and 25.

### Hypothesis 3

Key factors which facilitate advancement in career patterns include an early life plan to be an administrator, acquisition of educational credentials and experiences, a reasonable degree of permanence at each institution, need for achievement with definite career aspirations, and the attitudes and skills to conquer a sex culture which discriminates. There is evidence of an early life plan to become an administrator, as shown in Tables 9, 15, and 21. Most of the respondents entered administration between the ages of 21 and 35. The acquisition of educational credentials and experiences is reflected in Tables 5, 6, 12, 18, and 24. A high degree of permanence at each institution was reflected in the responses. The responses on the instrument and the personal interviews showed very strong evidence of knowledge and skill for coping with a sex culture which discriminates.

### Hypothesis 4

Intensity of aspirations for advancement in career patterns for women administrators in North Carolina higher education is inversely related to their academic rank. The data of the present study did not support this

hypothesis. If to become a chief administrator or to be promoted to another position can be denoted as the most intense aspiration for advancement, there was no evident pattern among the academic ranks.

#### Hypothesis 5

There are significant differences in life styles, career patterns and attitudes toward the American sex culture represented among women administrators in North Carolina higher education. This hypothesis could not be treated to determine statistically significant differences per se; however, the responses of the administrators on the information request and in the interviews showed a variety of social characteristics, career patterns and attitudes.

#### Hypothesis 6

In North Carolina higher education, there are more women administrators in Category II than in Category I as designated in this study. This hypothesis was supported by the data as shown in Table 1. Many of the respondents who specified "other" as their position also indicated that they held combined positions.

#### A Profile of the North Carolina Woman Administrator

The findings of the present study provided the following profile of the woman administrator in North Carolina senior colleges and universities:

#### Biographical

1. She was firstborn in a family of less than five.
2. She is married to a man who is employed in education or business.
3. They have two children above age 21.
4. Her mother holds the bachelor's degree, and her father holds the master's degree.
5. Her mother is a homemaker, and her father is employed in business.
6. She is between the ages of 45 and 54.

### Educational and Professional

1. She holds the master's degree from a public institution.
2. She entered administration between the ages of 21 and 35.
3. Her work experience included less than 5 years outside of education.
4. She has been at the present institution more than five years.
5. If a nonacademic administrator, she does not have tenure or academic rank. If she is an academic administrator, she is a full professor with tenure.
6. Her present salary is less than \$23,000--about \$17,913.
7. She was recruited because of her professional work experience.
8. She enjoys the challenge of her job, especially the humanitarian service to students and is satisfied with her performance and job.
9. She prefers to remain in her present position or to be promoted to a better position, in education.
10. She is responsible to the Vice Chancellor for Student Affairs.

### Attitudes

1. She agrees that sex discrimination exists in hiring and promoting at her present institution.
2. Her position was not adversely affected by discrimination legislation.
3. Her co-workers' attitudes toward her are positive.
4. She agrees that intellectual achievement by women is viewed as competitively aggressive behavior.
5. Although her husband's attitude toward her administrative career is favorable, she is undecided about whether marriage is an asset for her career.
6. She agrees overwhelmingly that women have as much need for achievement as men do.
7. She has absolutely no difficulty supervising men or women.
8. She believes that women bring unique qualities to administration.
9. In addition to administrative duties, she is involved in teaching, research, and consulting.

Unlike the women managers studies by Hennig and Jardim (1977), a substantial number of the women in the present study were married.

The Norman study (1970) identified characteristics of North Carolina women leaders which were evident in the responses of the women administrators in the present study. They appeared to be resourceful, self-assured, imaginative, shrewd, calculating, with an intellectual approach to a situation, and temperamentally independent.

The present study examined some of the same variables as those undertaken in the Arter study (1972). The persons included in the present study

came only from one state, and responses were sought only from the women administrators themselves, but unlike Arter's findings, there was no relationship between the position of women in top-level administration and the occupation of their mothers. There was a relationship between the position and the occupation of their fathers.

Like the Oltman (1970) findings, this study found that in colleges with enrollment under 10,000, the head librarian is a woman. Similar to that study, the North Carolina women administrators held very few positions of President, Vice-President, Physician, or College Dean other than Dean of Nursing.

The written responses of the women administrators support Florence Stevenson's (1973) findings which revealed that there is a growing awareness of the need for and willingness of women to support each other professionally.

Bryan and Boring (1947) found that 28% of the married women reported marriage to be a professional asset, and 34% reported it a hindrance. The respondents of the present study reflected similar attitudes toward marriage. This was also the finding in Agnes Fecher's (1972) study.

The Douglas (1976) study reported the modal administrator was forty-four years or older. The present study reported the modal administrator to be between the ages of 45 and 54. Like Douglas, this researcher found the administrator to be married to a professionally employed man. The fathers of both groups of respondents were in business. The studies were similar in regard to finding that, contrary to widely held beliefs, women administrators do not have periods of career discontinuance, but instead maintain continuous employment and dedication to one institution.

The Gardner (1966) study also found that women administrators come from small families. So did the present study. Gardner found that 67% were not married; the present study found 48% were not married. In the Gardner study, 78.4% held master's degrees and 17.6% held doctorates. The statistics for the present study were 44.1% held master's and 29% held doctorates. Similarly, the two studies found that women who became administrators had followed a career path which usually began with office work or teaching positions.

The findings of Holstrom (1972) were supported by this study which revealed that the respondents reported a high degree of career satisfaction.

McBee's (1962) examination of the position of the Dean of Women, in relation to where it was going, was very timely as it related to the present study. This research, conducted seventeen years later, found among the 245 respondents only nine Deans of Women.

In 1975, Katherine Goerss' study of 52 women holding the position of President, Vice President, Vice Chancellor, or Dean found that only 30.75% aspired for a higher position than the one held at that time. The present study of 245 women, with 20 women in those positions found that only 7 of the total group aspired to be the chief administrator.

#### Implications For Usefulness of the Research

The high percentage (78) of response to the information request, the handwritten notes, the enthusiasm shown for the findings of the study and the encouragement expressed by professional colleagues, all seem to support the researcher's assumption that participation in this kind of



study will sharpen the consciousness of these women administrators and deepen their awareness of their circumstance.

Implications for the preparation of future women administrators for North Carolina colleges and universities have been identified. For example, since on-the-job training ranked highest among experiences valued by the administrators, colleges which prepare students for administration or management will profit by having internships like those provided for careers in business and industry.

The desirability of being located in North Carolina was evident in the responses about job satisfaction. With only a few exceptions, the respondents did not express a desire to be more mobile. This has quite positive implications for the State's ability to be appealing to educators although the study did not identify the features which make this locale desirable.

According to the findings of the present study, women who are preparing for administrative positions in North Carolina higher education should consider among their college courses management, psychology, business, education, administration and leadership. They should also receive some type of apprentice experience as they prepare for administrative positions. They need to plan early to become administrators, secure academic credentials early, develop the skill of organizing work, learn decision-making skills, and learn to work with and to understand other people. If they marry, they should select husbands who see them as individuals with career interests and responsibilities.

The present study, along with other studies which were reviewed, support the conjecture that sex discrimination plays a major role in keeping women out of high ranking administrative positions. If the pool of qualified women is to be increased and stabilized, women must be encouraged to enter doctoral programs, and funds must be made available to implement their efforts.

#### Suggestions for Additional Research

1. It is recommended that this study be replicated after six years. That study should reveal the results of legislation and nation-wide consciousness of the plight of women administrators which are now prevalent.
2. It is recommended that a similar study be conducted to include male administrators in North Carolina senior colleges and universities in order to make comparisons with female administrators.
3. A similar study including North Carolina women managers or business executives in business and industry in order to make comparisons with women administrators in North Carolina higher education is recommended.
4. A follow-up study is recommended to solicit the opinions held by the top North Carolina higher education administrators toward the women administrators in the present study whom they supervise.
5. A follow-up study is recommended to solicit the opinions held by students toward the administrators in the present study.

#### Recommendations

A pervasive problem in our state's colleges and universities is the conspicuous absence of women in administrative positions, especially among the top positions in higher education. Since the introduction of affirmative action and other legislation treating sex discrimination,

recruitment procedures reveal some important changes; however, it seems that word of mouth still may be the most effective means of recruitment and sensitization to alleviate the shortage of women administrators. It is the conviction of the researcher that the following recommendations can be implemented by committed state agencies, organizations, or individuals to contribute toward the improvement and expansion of opportunities for women administrators:

1. Since there is value in early-life preparation and entry to administration, high school and college counselors should be familiar with the function of administrators. They could then encourage women students who seem to have leadership potential to have executive or management training and obtain at least the master's degree and the doctorate, if possible, so that they can enter administration according to a plan rather than to drift aimlessly into the field.
2. Provision of leadership workshops on a statewide level for presidents, deans and department chairmen to condition their attitudes positively toward appointing female administrators for positions in higher education. For example, benefit could be derived from re-conditioning of administrators' attitudes toward a woman's ability to make her own decisions about her position. It should not be the prerogative of an employer to decide alone that a woman would not move to a new city to assume a new position. Administrators tend to automatically think that a family comes first for a woman, but that it is unprofessional for a man to let family interfere with a decision about his career.
3. Development of a means for keeping women informed about the current status of women in North Carolina higher education administration, including information on positions available and the channels through which grievances concerning opportunities for advancement may be submitted for review and action. Additionally, educators could benefit from the publication and distribution of annual statewide progress reports showing the number of men and women holding administrative positions in higher education at each level of age, rank, degrees, tenure, and salary. Comparison of the status of women administrators with that of male administrators should make an observer acutely aware of the negative differences against women when considered along with the ratios of men to women in the state's population and student bodies.

4. Development of a network or support system on each college campus in the State. The program would include men and women, students, faculty, and staff, who respect the need for strengthening the awareness of the value of female participation in administration. This network could include recognition and encouragement of those women who already hold administrative positions. The agenda for this support system could include (1) exchange of information on administrative positions to be filled, (2) monitoring the progress of search or selection committees until the final selections are made, and (3) alerting women to career possibilities in higher education agencies such as foundations, accrediting associations, professional organizations, and corporations engaged in testing, research, and publication.
5. Support and encouragement of administrators who provide administrative opportunities for women and assist in moving them along the career ladder at a rate positively comparable with the promotions of men. These administrators should receive recognition and be encouraged to continue and to expand their policies.

## BIBLIOGRAPHY

- Allen, G. The graduate students' guide to theses and dissertations: A practical manual for writing and research. San Francisco: Jossey-Bass Publishers, 1976.
- American Association of School Administrators. Sex equality in educational administration. Arlington, Virginia: American Association of School Administrators, 1975.
- American Association of University Professors. Nearly keeping up. AAUP Bulletin, 1976, 62, 220-225.
- American Council on Education. College and university faculty: A statistical description. Research Report, 5 (5), 1970.
- American Council on Education. Teaching faculty in academe: 1972-73. Research Report 8 (2), 1974.
- American Psychological Association Publication Manual. Washington, D. C.: The American Psychological Association, 1974.
- Arter, M. H. The role of women in administration in state universities and land-grant colleges (Doctoral dissertation, Arizona State University, 1972). Dissertation Abstracts International, 1973, 32, 5559A. (University Microfilms No. 72-13,006).
- Ashburn, E. A. Motivation, personality, and work-related characteristics of women in male-dominated professions. Monographs of the National Association For Women Deans, Administrators, and Counselors. Washington, D. C.: National Association For Women Deans, Administrators, and Counselors, 1977 (Whole No. 2).
- Astin, H. S. The woman doctorate in America. New York: Russell Sage Foundation, 1969.
- Astin, H. S. & Hirsch, W. Z. The higher education of women. New York: Praeger Publishers, 1978.
- Bardwick, J. M. Psychology of women. New York: Harper & Row, 1971.
- Bardwick, J. M. & Douvan, E. Ambivalence: The socialization of women. In J. Bardwick (Ed.), Readings on the psychology of women. New York: Harper & Row, 1972.

- Barter, A. S. Status of women in school administration. Education Digest, 1959, 25, 40-41.
- Basil, D. Women in management. New York: Dunellen, 1972.
- Bem, S. L. & Bem, D. J. On liberating the female student. The School Psychology Digest, 1973, 2 (3), 10-18.
- Bem, S. L. & Bem, D. J. Training the woman to know her place: The social antecedents of women in the world of work. Harrisburg: The Pennsylvania Department of Education, 1973.
- Bernard, J. Academic women. University Park: The Pennsylvania State University Press, 1964.
- Berry, J. & Kushner, R. A critical look at the queen bee syndrome. Journal of the National Association For Women Deans, Administrators, and Counselors, 1975, 38 (4), 173-176.
- Blaska, B. Women in academe: The need for support groups. Journal of the National Association For Women Deans, Administrators, and Counselors, 1976, 39 (4), 173-177.
- Boulding, E. The global macroproblem: Prospects for women and minorities. Liberal Education, 1976, 62 (2), 185-207.
- Bowman, G. B. W. The image of a promotable person in business enterprise. (Doctoral Dissertation, New York University, 1962). Dissertation Abstracts International, 1963, 24/04, 1437 (University Microfilms No. 63-05-339).
- Boyle, M. B. Equal opportunity for women is smart business. In H. H. Frank (Ed.), Women in the organization. University Park: University of Pennsylvania Press, 1977.
- Bryan, A. I. & Boring, E. G. Women in American psychology: Factors affecting their professional careers. American Psychologist, 1947, 14.
- Burstyn, J. N. Striving for equality: Higher education for women in U. S. since 1900. University College Quarterly, 1973, 18(2), 22-32.
- Carnegie Commission on Higher Education. Opportunities for women in higher education. New York: McGraw-Hill Book Company, Inc., 1973.
- Carnegie Commission on Higher Education. Women and the power to change, F. Howe (Ed.). New York: McGraw-Hill Book Company, Inc., 1975.
- Carnegie Foundation For The Advancement of Teaching. More than survival: prospects for higher education in a period of uncertainty. San Francisco: Jossey-Bass Publishers, 1975.

- Caplow, T. & McGee, R. The academic market place. New York: Basic Books, 1959.
- Carroll, M. A. Women in administration in higher education. Contemporary Education, 1972, 43, 214-218.
- Chemers, M. M. The relationship between birth order and leadership style. The Journal of Social Psychology, 1970, 80, 243-244.
- Converse, F. Wellesley College: A chronicle of the years 1875-1938. Wellesley, Massachusetts: Hathaway House Bookshop, 1939.
- Cook, B. Roles, labels, stereotypes: A counselor's challenge. Journal of the National Association For Women Deans, Administrators, and Counselors, 1971, 34(3), 99-105.
- Dale, C. Women are still missing persons in administrative and supervisory jobs. Educational Leadership, 1973, 31(2), 123-127.
- Davis, A. E. Women as a minority group in higher academics. The Professional Woman. Cambridge, Massachusetts: Schenkman Publishing Company, Inc., 1971.
- Deckard, B. The woman's movement. New York: Harper and Row, 1975.
- Dickerson, K. G. Are female college students influenced by the expectations they perceive their faculty and administration have for them? Journal of the National Association For Women Deans, Administrators, and Counselors, 1974, 37(4), 167-172.
- Donald, M. N. Implications of nonresponse for the interpretation of mail questionnaire data. Public Opinion Quarterly, 1960, 24(1), 99-114.
- Douglas, P. D. An analysis of demographic characteristics and career patterns of women administrators in higher education (Doctoral dissertation, University of Connecticut, 1976). Dissertation Abstracts International, 1977, 38/02-A, 653. (University Microfilms No. 77-16705).
- Eble, K. E. Strengthening the position of women faculty members. Journal of the National Association For Women Deans, Administrators, and Counselors, 1972, 35(4), 165.
- Epstein, C. F. Encountering the male establishment: Sex-status limits on women's careers in the professions. American Journal of Sociology, 1970, 75(6), 965-981.
- Epstein, C. F. Structuring success for women: Guidelines for gatekeepers. Journal of the National Association For Women Deans, Administrators, and Counselors, 1973, 37(1), 35-36.

- Epstein, C. F. Woman's place: Options and limits in professional careers. Berkeley: University of California Press, 1971.
- Erdos, P. L. & Morgan, A. Professional mail surveys. New York: McGraw-Hill Book Company, 1970.
- Fecher, A. R. Career patterns of women in college and university administration (Doctoral dissertation, Indiana University, 1972). Dissertation Abstracts International, 1973, 33-A. (University Microfilms No. 73-10 765).
- Fillmer, H. T. Sexist teaching: What you can do. Teacher, 1974, 91(5), 30-32.
- Fisher, E. The second sex, junior division. The New York Times Review, May 24, 1970, pp. 6,44.
- Fleming, J. T. Assessment of employment practices towards women administrators in institutions of higher education (Doctoral dissertation, Arizona State University, 1974). Dissertation Abstracts International, 1974, 34/09-A, 5553. (University Microfilms No. 75-00488).
- Fley, J. A. The time to be properly ficious. Journal of the National Association For Women Deans, Administrators, and Counselors, 1974, 37(2), 53-58.
- Frank, H. Women in the organization. University Park, University of Pennsylvania Press, 1977.
- Furniss, W. T. & Graham, P. Women in higher education. Washington, D. C.: American Council on Education, 1974.
- Gardner, H. R. Women administrators in higher education in Illinois: A study of current career patterns (Doctoral dissertation, Indiana University, 1966). Dissertation Abstracts International, 1966, 27/06-A, 1686. (University Microfilms No. 66-12655).
- Gasser, M. H. Career patterns of women administrators in higher education: Barriers and constraints (Doctoral dissertation, Southern Illinois University, 1975). Dissertation Abstracts International, 1976, 36/12-A, 7893. (University Microfilms No. 76-13240).
- Gillies, J. In defense of the dean of women: A new role for a new world. Journal of the National Association For Women Deans, Administrators, and Counselors, 1975, 38(4), 156-162.
- Goerss, K. V. W. A study of personality factors of selected women administrators in higher education (Doctoral dissertation, University of Southern Mississippi, 1975). Dissertation Abstracts International, 1975, 36/04-A, 1942. (University Microfilms No. 75-22500).



- Goerss, K. V. W. Women in education: A review of research 1960-1976. Monographs of the National Association For Women Deans, Administrators, and Counselors. Ruth Strang Research Award, July, 1977, (Whole No. 3).
- Gordon R. S. & Ball, P. G. Survival dynamics for women in educational administration. Journal of the National Association For Women Deans, Administrators, and Counselors, 1977, 40(2), 46.
- Graham, P. A. Status transitions of women students, faculty, and administrators. In S. S. Rossi & A. Calderwood (Eds.), Academic women on the move. New York: Russell Sage Foundation, 1973.
- Greene, M. Honorable work and delayed awakenings: Education and American women. Phi Delta Kappan, September, 1976, pp. 25-29.
- Guide for Preparation of Theses and Dissertations. Greensboro, North Carolina: The Graduate School, The University of North Carolina at Greensboro, 1977.
- Harragan, B. L. Games mother never taught you: Corporate gamesmanship for women. New York: Warner Books, Inc., 1977.
- Harris, A. S. The second sex in academe. AAUP Bulletin, 1970, 56, 283-295.
- Hartley, R. E. Children's concepts of male and female roles. Merrill Palmer Quarterly, 1960, 6(3), 153-163.
- Hefferlin, J. B. & Phillips, E., Jr. Information service for academic administration. San Francisco: Jossey-Bass Publishers, 1971.
- Hennig, M. & Jardim, A. The managerial woman. Garden City, New York: Anchor Press, 1977.
- Hernstadt, C. Keeping up with Title IX. Eric/Higher Education Research Currents, January, 1977.
- Holmstrom, L. L. The two-career family. Cambridge, Massusetts: Schenkman, 1972.
- Holmstrom, L. L. Women's career patterns: Appearance and reality. Journal of the National Association For Women Deans, Administrators, and Counselors, 1973, 36(2), 77-78.
- Horner, M. The motive to avoid success and changing aspirations of college women. In J. M. Bardwick (Ed.), Readings on the psychology of women. New York: Harper and Row, 1972.

- Horner, M. Toward an understanding of achievement-related conflicts in women. Journal of Social Issues, 1972, 28(2), 157-175.
- Howard, S. But we will persist: A comparative research report on the status of women in academe. Washington, D. C.: American Association of University Women, 1978.
- Howard, S. Why aren't women administering our schools? Arlington, Virginia: National Council of Administrative Women in Education, 1975.
- Howe, F. Sexual stereotypes start early. Saturday Review, 1971, 76(82), 92-94.
- Husbands, S. A. Women's place in higher education. School Review, 1972, 80(2), 261-275.
- Jacobs, J., Up the back staircase. Address presented at the convention of the National Association of Independent Schools, Atlantic City, March 8, 1975.
- Kaley, M. M. Attitudes toward the dual role of the married professional women. American Psychologist, 1971, 26(3), 301-306.
- Kauffman, S. B. Few women get positions of power in academe, survey discloses. The Chronicle of Higher Education, 1970, 5(10), 1.
- Kaufman, H. The status of women in administration in selected institutions of higher education in the United States (Doctoral dissertation, New York University, 1961). Dissertation Abstracts International, 1962, 22/12, 4239-4240. University Microfilms No. 62-1443).
- King, E. C. Perceptions of female vocational faculty members as seen by themselves and college administrators. University Park: Pennsylvania State University, 1974.
- Koontz, E. The best-kept secret of the past 5,000 years: Women are ready for leadership in education. Bloomington, Indiana: The Phi Delta Kappa Educational Foundation, 1972.
- LaBarthe, E. R. A study of the motivation of women in administrative and supervisory positions in selected unified school districts in Southern California (Doctoral dissertation, University of Southern California, 1973). Dissertation Abstracts International, 1973, 34, 3695-A. (University Microfilms No. 73-31, 364.
- Leonard, Y. E. An analysis of the status of women as full-time faculty members in coeducational colleges and universities of California (Doctoral dissertation, University of Southern California, 1963). Dissertation Abstracts International, 1963, 24/01, 144. (University Microfilms No. 63-04232).

- Lewis, E. C. Counselors and girls. Journal of Counseling Psychology, 1965, 12(2), 159-165.
- Lifton, R. J. The woman in America. Westport, Connecticut: Greenwood Press, 1977.
- Lloyd-Jones, E. Mc. Women and leadership. Journal of the National Association For Women Deans, Administrators, and Counselors, 1973, 36(2), 52-55.
- Long-Laws, J. On campus with women: Newsletter of the project on the status and education of women, Washington, D. C.: Association of American Colleges, 1976, 13.
- Marable, J. M. The role of women in public school administration as perceived by black women administrators in the field (Doctoral dissertation, Miami University, 1974). Dissertation Abstracts International, 36/01-A, 73. (University Microfilms No. 75-14316).
- Matheny, P. H. P. A study of the attitudes of selected male and female teachers, administrators, and board of education presidents toward women in educational administrative positions (Doctoral dissertation, Northwestern University, 1973). Dissertation Abstracts International, 1973, 34, 2976-A. (University Microfilms No. 73-30, 658).
- McBee, M. L. The role of the dean of women in selected institutions of higher learning (Doctoral dissertation, Ohio State University, 1961). Dissertation Abstracts International, 1962, 22, 3493. (University Microfilms No. 62-792).
- McBee, M. L., Murray, R. & Suddick, D. E. Self-esteem differences of professional women. Journal of the National Association For Women Deans, Administrators, and Counselors, 1976, 39(4), 186-189.
- McCorkle, E. M. Top-level women administrators in higher education: A study of women presidents, chief academic officers, and academic deans in Federal Regions I, VI, and X (Doctoral dissertation, Oklahoma State University, 1974). Dissertation Abstracts International, 36/11-A, 7238. (University Microfilms No. 76-09715).
- Mitchell, E. The learning of sex roles through toys and books: A woman's view. Young Children, 1973, 28(4), 226-231.
- Mosher, J. Masculinity and femininity. Paper delivered at Conference on the Status of Women: 51% Minority. NEA/USOE O-72-2507. Storrs, Connecticut, 1972.
- National Education Association. The status of women faculty and administrators in higher education institutions, 1971-1972. Washington, D. C.: Research Division of NEA, 1973.

- Neidig, M. The rise and decline of women administrators. National Elementary Principal, 1976, 56(2), 53-54.
- Neisser, E. G. The eldest child. New York: Harper, 1957.
- Nelson, H. & Goldman, P. Attitudes of high school students and young adults toward the gainful employment of married women. Journal of Educational Counseling and Services, 1969, 18, 251-255.
- Nie, N. H., Hull, C. H., Jenkins, J., Steinbrenner, K., & Bent, D. H. Statistical package for the social sciences(2nd ed.). New York: McGraw Hill, 1975.
- Nieboer, N. A. There is a certain kind of woman. Journal of the National Association For Women Deans, Administrators, and Counselors, 1975, 38(3), 99-103.
- Norman, B. A study of women in leadership positions in North Carolina. The Delta Kappa Gamma Bulletin, 1970, 36, 10-14.
- North Carolina Education Directory 1978-1979. Raleigh, North Carolina: North Carolina State Department of Public Instruction, 1978.
- Nye, F. & Hoffman, L. W. The employed mother in America. Chicago: Rand McNally, 1963.
- Oltman, R. M. Campus 1970: Where do women stand? Washington, D. C.: American Association of University Women, 1970.
- Oltman, R. M. The evolving role of the women's liberation movement in higher education. Paper presented at the convention of the American Association of University Women, Washington, D. C., March, 1971.
- Palley, M. L. Women as academic administrators in the age of affirmative action. Journal of the National Association For Women Deans, Administrators, and Counselors, 1978, 42(1), 3-9.
- Palmieri, P. & Shakeshaft, C. S. Up the front staircase: A proposal for women to achieve parity with men in the field of educational administration. Journal of the National Association For Women Deans, Administrators, and Counselors, 1976, 39(2), 58-65.
- Parrish, J. B. Women in top-level teaching and research. Journal of The American Association of University Women, 1962, 55, 102-107.
- Patrick, T. A. Personality and family background characteristics of women who enter male-dominated professions (Doctoral dissertation, Columbia University, 1973). Dissertation Abstracts International, 1973, 34, 2396-A. (University Microfilms No. 73-24, 076).

- Pfiffner, V. Factors associated with women in major administrative positions in California community colleges (Doctoral dissertation, University of Southern California, 1972). Dissertation Abstracts International, 1973, 33-A, 4888-A. (University Microfilms No. 73-7260).
- Pifer, A. Women working: Toward a new society. Report of the President of Carnegie Corporation, 1976.
- Podalsky, A. & Smith C. R. Education directory, colleges and universities 1977-1978. Washington, D. C.: National Center for Education Statistics, United States Department of Health, Education, and Welfare, 1978.
- Ramey, E. Cited by Pogrebin, L.C. The working woman. The Ladies Home Journal, 1974, 91(4), 38-40.
- Reeves, M. E. An analysis of job satisfaction of women administrators in higher education. Journal of the National Association For Women Deans, Administrators, and Counselors, 1975, 38(3), 132-135.
- Roby, P. Structural and internalized barriers to women in higher education. In C. Safilios-Rothschild (Ed.), Toward a sociology of women. Lexington, Massachusetts: Xerox Publishing Company, 1972.
- Rossi, A. S. The roots of ambivalence in America. In J. M. Bardwick (Ed.), Readings on the psychology of women. New York: Harper and Row, 1972.
- Russell, D. S. Wanted: A more realistic educational preparation for women. Educational Leadership, November, 1975, pp. 118-122.
- Safilios-Rothschild, C. Women and social policy. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1974.
- Sandler, B. Backlash in academe: A critique of the Lester Report. Teachers College Record, 1974, 76(1), 409.
- Sandmeyer, L., Kohn, P., Driscoll, J. B., Harrison, C. H. & Sagaria, M. A. D. A program for optimizing women's leadership skills. (OWLS) Washington, D. C.: National Association For Women Deans, Administrators, and Counselors, 1977.
- Schetlin, E. M. Wonderland and looking-glass: Women in administration. Journal of the National Association For Women Deans, Administrators, and Counselors, 1975, 38(3), 104-109.

- Schlack, M. J. A comparison of personal characteristics and leadership styles of university upper management and middle management women student personnel administrators (Doctoral dissertation, Western Michigan University, 1974). Dissertation Abstracts International, 1974, 35/02-A, 852. (University Microfilms No. 74-19076).
- Schmuck, P. Deterrents to women's careers in school management. Sex Roles, 1975, 1(4), 339-353.
- Scully, M. Women in higher education: Challenging the status quo. The Chronicle of Higher Education, 1970, 4(18), 2-3.
- Sexton, P. C. Women in education. Bloomington, Indiana: Phi Delta Kappa Educational Foundation, 1976.
- Shapiro, R. Should you work for a woman? Harpers Bazaar, August, 1977, p. 85.
- Siegal, A. & Haas, M. The working mother: A review of research. Child Development, 1963, 54, 33-37.
- Simpson, L. A. A study of employing agents' attitudes toward academic women in higher education (Doctoral dissertation, The Pennsylvania State University, 1968). Dissertation Abstracts International, 1969, 29/12-A, 4203). (University Microfilms No. 69-9810).
- Smith, R. A. Women administrators: Is the price too high? National Association of Secondary School Principals Bulletin, 1976, 60(3), 99-103.
- Stead, B. A. Women in management. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1978.
- Stevenson, F. B. Women administrators in Big Ten universities (Doctoral dissertation, Michigan State University, 1973). Dissertation Abstracts International, 1974, 34, 5553-A. (University Microfilms No. 74-06141).
- Sudman, S. Reducing the cost of surveys. Chicago: Aldine Publishing Company, 1967.
- TenElshof, A. & Searle, S. E. Developing a women's center. Journal of the National Association For Women Deans, Administrators, and Counselors, 1974, 37(4), 173-178.
- Tessler, S. E. Profiles of selected women college presidents reflecting the emerging role of women in higher education (Doctoral dissertation, Boston College, 1976). Dissertation Abstracts International, 1976, 37/02-A, 840. (University Microfilms No. 76-18927).

- Thomas, E. J. Career patterns of black women administrators in historically negro senior colleges and universities (Doctoral dissertation, Washington State University, 1976). Dissertation Abstracts International, 1976, 37/06-A, 3459. (University Microfilms No. 76-27763).
- Tibbetts, S. L. The enemy is us. Pittsburgh: Know, Inc., May, 1973.
- Tibbetts, S. L. Sex-role stereotyping: Why women discriminate against themselves. Journal of the National Association For Women Deans, Administrators, and Counselors, 1975, 38(4), 177-183.
- Timpano, D. M. How to tell if you're discriminating against would-be women administrators, and what to do about it if you are. American School Board Journal, 1976, 163(6), 19-23.
- Touchton, J. & Shavlik, D. Challenging the assumptions of leadership: Women and men of the academy. New Directions For Higher Education: Developing and Evaluating Administrative Leadership. San Francisco: Jossey-Bass, 1978.
- United States Department of Labor, Women's Bureau, The earnings gap between women and men. Washington, D. C.: U. S. Government Printing Office, 1976.
- United States Department of Labor. Manpower requirements, resources utilization and training. Washington, D. C.: U. S. Government Printing Office, 1973.
- United States Department of Labor, Women's Bureau. The myth and the reality. Washington, D. C.: U. S. Government Printing Office, 1974.
- United States Department of Labor, Citizens Advisory Council on the Status of Women. Need for studies of sex discrimination. Washington, D. C.: U. S. Government Printing Office, September, 1972.
- United States Department of Labor, Women's Bureau. Underutilization of women workers. Washington, D. C.: U. S. Government Printing Office, 1971.
- United States Department of Labor. Women: Their social and economic status. Washington, D. C.: U. S. Government Printing Office, 1970.
- Van Meir, E. J. Sexual discrimination in school administration opportunities. Journal of the National Association For Women Deans, Administrators, and Counselors, 1975, 38(4), 163-167.
- Verheyden, H. & Kindergarten, M. E. The training ground for women in administration. Journal of the National Association For Women Deans, Administrators, and Counselors, 1975, 38(4), 151-155.

- Vlahos, M. Survey of the status of women. Institutional Research Report No. 7. Fort Lauderdale: Broward Community College, 1975.
- Walsh, P. A. Career patterns of women administrators in higher education institutions in California (Doctoral dissertation, University of California, Los Angeles, 1975). Dissertation Abstracts International, 1975, 36/06-A, 3323. (University Microfilms No. 75-27004).
- Warwick, D. & Lininger, C. A. The sample survey: Theory and practice. New York: McGraw-Hill, 1975.
- Wasserman, E., Lewin, A. Y. & Bleiweis, L. H. Women in academia: Evolving policies toward equal opportunities. New York: Praeger Publishers, 1975.
- Winkler, K. Women administrators seek way out of isolation. Chronicle of Higher Education, 1973, 8, 5.
- Wolfe, D. America's resources of specialized talent. New York: Harper & Row, 1954.
- Woody, T. History of women's education in the United States. New York: The Science Press, 1929.



**APPENDICES**

APPENDIX A - POSITIONS OF WOMEN ADMINISTRATORS

## CATEGORY I

1. President, Chancellor
2. Assistant to the President, Chancellor
3. Administrative Assistant to the President, Chancellor
4. Vice President, Vice Chancellor
5. Assistant Vice President, Assistant Vice Chancellor
6. Assistant to the Vice President; Assistant to the Vice Chancellor
7. Dean of Institutional Research
8. Dean of the College
9. Dean of the School of Nursing; Home Economics, Health, Phys. Ed., Etc.
10. Dean of Students--Development, Services, Organizations, Activities
11. Associate Dean of Students
11. Dean of Women
13. Business Manager

## CATEGORY II

14. Director of Admissions, Registration, Records
15. Director of Alumnae (i) Affairs
16. Director of Appointments
17. Director of Career Planning
18. Director of Continuing Education
19. Director of Counseling
20. Director of Data Processing
21. Director of Financial Aid
22. Director of Personnel
23. Director of Placement

CATEGORY II

24. Director of Public Information, Relations
25. Director of Social Work
26. Director of Special Services
27. Director of Student Teaching
28. Director of Summer School
29. Director of Women's Services
30. Head Librarian
31. Other

**APPENDIX B-DATA COLLECTION MATERIALS**

**Letter Accompanying Information Request  
Information Request  
Follow-up Reminder Letter  
Topics Pursued During Interviews**

## THE UNIVERSITY OF NORTH CAROLINA

AT GREENSBORO

School of Education

March 9, 1979

This is a North Carolina statewide survey among women administrators in four-year colleges and universities. You have been identified as an administrator in the State of North Carolina. The purpose of this research is to get certain opinions from you and other women administrators, and to elicit information on the social characteristics and career patterns which prevail in the State among women administrators. Further, this research will focus on features which will strengthen the continued development of women administrators and enhance the administration potential of newcomers to administration.

Your response is very essential to the accuracy of this study, whether or not all of the questions pertain to you. Please take about twenty minutes to respond to the questions on the enclosed information request and return it in the stamped reply envelope. All answers are confidential and will be used only in combination with those of other women administrators. The survey will not harm your interests.

If you are interested in receiving a report on the findings of this research, and wish to insure the anonymity of your responses, please send a separate postcard or letter requesting the results of the Survey on Women Administrators in Higher Education to the address below. I will be glad to send you a complimentary report when it is ready.

Please return the completed Information Request at your earliest convenience to me at 801 Cambridge Street, Greensboro, North Carolina 27406. Thank you for your participation and for your willingness to give time to the survey.

Very Sincerely yours,

(Mrs.) Lucille J. Figgott, Doctoral  
Candidate in Educational Administration

Donald W. Russell, Adviser  
Professor of Education

Enclosures 2

INFORMATION REQUEST

201

This confidential information will be used in research on the social characteristics and career patterns of women administrators in four-year North Carolina colleges and universities.

-----  
Please complete and return immediately to Mrs. Lucille J. Piggott, 801 Cambridge Street, Greensboro, North Carolina 27406 (919-274-1842)  
-----

I. PROFESSIONAL WORK EXPERIENCE BACKGROUND

A. Present position title (Check one closest to your title.).

1 Category I

- (1) President, Chancellor
- (2) Assist. to Pres., Chancellor
- (3) Adm. Assist. to Pres., Chancellor
- (4) Vice President, Vice Chancellor
- (5) Assist. Vice Pres., Assist. V.C.
- (6) Assist. to V.P., Assist. to V.C.
- (7) Dean of Institutional Research
- (8) Dean of College
- (9) Dean of Nursing, Home Econ., H. Phys. Ed.,  
Recr., etc.
- (10) Dean of Students-Development, Services,  
Organiz., Activities
- (11) Associate Dean of Students
- (12) Dean of Women
- (13) Business Manager

2 Category II

- (14) Director of Admissions, Registration, Records
- (15) Director of Alumnae(i) Affairs
- (16) Director of Appointments
- (17) Director of Career Planning
- (18) Director of Continuing Education
- (19) Director of Counseling
- (20) Director of Data Processing
- (21) Director of Financial Aid
- (22) Director of Personnel
- (23) Director of Placement
- (24) Director of Public Information, Relations
- (25) Director of Social Work
- (26) Director of Special Services
- (27) Director of Student Teaching
- (28) Director of Summer School
- (29) Director of Women's Services
- (30) Head Librarian
- (31) Other (Specify) \_\_\_\_\_

- B. Presently employed in public \_\_\_1 or private \_\_\_2 institution (Check one).
- C. To provide information on the pattern of your career, would you please list the positions which you have held since graduation from college, including major community and volunteer positions. Please begin with your present position and work backwards to include your first position:

| Position Held<br><br>1 | Agency<br><br>2 | Duration<br>In Years |           | Age at Entry |              |            |
|------------------------|-----------------|----------------------|-----------|--------------|--------------|------------|
|                        |                 | (1-5)<br>3           | (5+)<br>4 | (-20)<br>5   | (21-35)<br>6 | (36+)<br>7 |
|                        |                 |                      |           |              |              |            |
|                        |                 |                      |           |              |              |            |
|                        |                 |                      |           |              |              |            |
|                        |                 |                      |           |              |              |            |
|                        |                 |                      |           |              |              |            |
|                        |                 |                      |           |              |              |            |

- D. After Bachelor's degree, number of years employed outside of education. (1-5) \_\_\_ 1 (over 5) \_\_\_ 2 (Check one)
- E. After Bachelor's degree, number of positions held in education. (1-5) \_\_\_ 1 (over 5) \_\_\_ 2 (Check one)
- F. Number of years employed at present institution. (1-5) \_\_\_ 1 (over 5) \_\_\_ 2 (Check one)
- G. Number of years in present position. (1-5) \_\_\_ 1 (over 5) \_\_\_ 2



H. Present academic rank (Check one).

- |  |   |
|--|---|
| <input type="checkbox"/> (1) Professor           | <input type="checkbox"/> (4) Instructor               |
| <input type="checkbox"/> (2) Associate Professor | <input type="checkbox"/> (5) Lecturer                 |
| <input type="checkbox"/> (3) Assistant Professor | <input type="checkbox"/> (6) Other Designation: _____ |

I. Tenure: Yes \_\_\_\_\_ 1 No \_\_\_\_\_ 2

J. Academic promotions received at present institution (Check numbers of all which apply to you.).

- (1) Lecturer to Instructor  
 (2) Instructor to Assistant Professor  
 (3) Assistant Professor to Associate Professor  
 (4) Associate Professor to Professor  
 (5) There is no academic rank for this position.  
 (6) Other (Specify) \_\_\_\_\_

K. Most recent position description change received at present institution (Check one).

- (1) Part-time teaching to teaching/administration  
 (2) Part-time teaching to full-time administration  
 (3) Teaching/administration to full-time administration  
 (4) Full-time teaching to teaching/administration  
 (5) Full-time teaching to full-time administration  
 (6) Other (specify) \_\_\_\_\_  
 (7) None

L. Present annual gross salary range (Check one).

- (1) Less than \$ 8,000  
 (2) \$ 8,000 - \$12,000  
 (3) \$13,000 - \$17,000  
 (4) \$18,000 - \$22,000  
 (5) \$23,000 - \$27,000  
 (6) \$28,000 - \$32,000  
 (7) \$33,000 - \$37,000  
 (8) \$38,000 - \$42,000  
 (9) More than \$42,000

M. Method of entry to present educational administration position (Check one).

- (1) Actively sought it as a career goal  
 (2) Applied for position  
 (3) Was recruited for position  
 (4) Directed or inspired by a woman  
 (5) Directed or inspired by a man  
 (6) Other (Specify) \_\_\_\_\_

N. Reason for being selected, as perceived by you  
(Check one).

- (1) Educational background
- (2) Administrative community, political or volunteer service
- (3) Professional work experience
- (4) Affirmative action requirements
- (5) Personality characteristics
- (6) Other (Specify) \_\_\_\_\_

O. The greatest satisfaction from your present position  
(Check one).

- (1) Sense of achievement
- (2) Sense of affiliation with professional colleagues
- (3) Sense of power
- (4) Monetary rewards
- (5) Humanitarian service to students
- (6) Challenge of job
- (7) Favor the academic atmosphere in higher education
- (8) Other (Explain) \_\_\_\_\_

P. Your aspirations for the next five years are focused primarily on what one objective (Check one).

- (1) To become the chief administrator of an institution of higher education
- (2) To be promoted to another position in higher education with more responsibility and/or power
- (3) To remain in this present position in higher education
- (4) To leave the field of higher education for other employment
- (5) Retirement
- (6) Other (Specify) \_\_\_\_\_

Q. Designate the perceived constraint or barrier to advancement (Check one).

- (1) Sex discrimination
- (2) Desire to remain in present geographic locale
- (3) Family responsibilities
- (4) Satisfied with current position
- (5) Other (Specify) \_\_\_\_\_

R. Identify the chief feature which would strengthen and/or improve your present position (Check one).

- (1) Broader administrative involvement
- (2) Additional formal study
- (3) Availability of workshops treating pertinent topics
- (4) Salary increase
- (5) Improvement of support system to offer women administrators collegial relationships with other women administrators
- (6) Other (Specify) \_\_\_\_\_

S. Indicate the strongest influence on your administrative career pattern (Check one).

- (1) Professional work experience background
- (2) Biographical background
- (3) Educational background
- (4) The American sex culture
- (5) Other (Specify) \_\_\_\_\_

## II. DUTIES OF THE POSITION

A. Check numbers of designations which reflect your office:

- (1) Responsible directly to Governing Board
- (2) Responsible directly to President, Chancellor
- (3) Responsible directly to the Vice President  
For \_\_\_\_\_
- (4) Responsible directly to someone other than the  
above named
- (5) Responsible for Personnel Affairs
- (6) Responsible for Fiscal Affairs
- (7) Responsible for Academic Affairs
- (8) Responsible for Physical Affairs
- (9) Responsible for Student Affairs
- (10) Monitor policy implementation
- (11) Communicate decisions made by supervisor
- (12) Delegate authority to subordinates

B. Categorical Duties: (Rank the order of applicable duties)

- (1) Administrative
- (2) Teaching
- (3) Research
- (4) Consulting
- (5) Other (Specify) \_\_\_\_\_

## III. BIOGRAPHICAL BACKGROUND

A. Present Age Range (Check one)

- (1) 24 or under 1
- (2) 25 - 34 2
- (3) 35 - 44 3
- (4) 45 - 54 4
- (5) 55 - 64 5
- (6) 65 or above 6

B. Birth Order: (Number 1) \_\_\_\_\_ 1 (2) \_\_\_\_\_ 2 (3+) \_\_\_\_\_ 3  
of a family of (1-5) \_\_\_\_\_ 4 (more than 5) \_\_\_\_\_ 5 children.

C. Your present marital status (Check one).

- (1) Single
- (2) Married
- (3) Widowed
- (4) Separated
- (5) Divorced
- (6) Remarried

D. Husband's occupation (Check one).

- (1) No husband
- (2) Education
- (3) Business
- (4) Professional
- (5) Farmer
- (6) Government
- (7) Other

E. Number of children you have (Check one).

- 0      1      2      3      4      5      6      7+       
1            2            3            4            5            6            7            8

F. Number of your children in each age group:

Ages (Enter number)

- 1 - 5      1
- 6 -10      2
- 11-15      3
- 16-20      4
- 21+      5

G. Amount of time spent in military service (Check one)

- none      1 1 year      2 1 year +      3

H. Your Military Occupational Specialty:

- administrative      1 other      2

I. Parents' education (Check appropriate category)

|        | Less than H.S. | High School   | Post College H.S. | Advanced Study | Highest degree held |
|--------|----------------|---------------|-------------------|----------------|---------------------|
| Mother | <u>    </u> 1  | <u>    </u> 2 | <u>    </u> 3     | <u>    </u> 4  | <u>    </u> 5       |
| Father | <u>    </u> 7  | <u>    </u> 8 | <u>    </u> 9     | <u>    </u> 10 | <u>    </u> 11      |
|        |                |               |                   |                | <u>    </u> 12      |

J. Parents' occupations (If deceased, occupation before death)

|        | Homemaker     | Business      | Professional  | Other         |
|--------|---------------|---------------|---------------|---------------|
| Mother | <u>    </u> 1 | <u>    </u> 2 | <u>    </u> 3 | <u>    </u> 4 |
| Father | <u>    </u> 5 | <u>    </u> 6 | <u>    </u> 7 | <u>    </u> 8 |

## IV. EDUCATIONAL BACKGROUND

A. Educational levels attained by you, including honorary degrees.

| Name of College | Public Private |   | List the degrees earned |   |   |   | Age degree earned |       |       |     |
|-----------------|----------------|---|-------------------------|---|---|---|-------------------|-------|-------|-----|
|                 | 1              | 2 | 3                       | 4 | 5 | 6 | -20               | 21-35 | 36-50 | 51+ |
|                 |                |   |                         |   |   |   |                   |       |       |     |
|                 |                |   |                         |   |   |   |                   |       |       |     |
|                 |                |   |                         |   |   |   |                   |       |       |     |
|                 |                |   |                         |   |   |   |                   |       |       |     |

B. College courses and/or experiences which provided the most help for preparation for administrative duties (Please number pertinent ones in order of perceived value.).

- |   |  |
|---|--|
| <input type="checkbox"/> (1) Business       | <input type="checkbox"/> (8) Management courses or workshops |
| <input type="checkbox"/> (2) Sociology      | <input type="checkbox"/> (9) Personnel management            |
| <input type="checkbox"/> (3) Psychology     | <input type="checkbox"/> (10) Leadership seminars            |
| <input type="checkbox"/> (4) Education      | <input type="checkbox"/> (11) On-the-job training            |
| <input type="checkbox"/> (5) Fine Arts      | <input type="checkbox"/> (12) Community volunteer            |
| <input type="checkbox"/> (6) Law            | <input type="checkbox"/> (13) Other (Specify)                |
| <input type="checkbox"/> (7) Administration |  |

- A. Opinions or Attitudes -- The best answer to each statement is your personal opinion. There are five possible responses for each statement.

SA (Strongly Agree) U (Undecided) SD (Strongly Disagree)  
 A (Agree) D (Disagree)

Please circle only one of the five responses for each statement

- |  | 1  | 2 | 3 | 4 | 5  |
|--|----|---|---|---|----|
| (1.) In this institution, women administrators are hired or promoted as readily as men.  | SA | A | U | D | SD |
| (2.) Legislation related to non-discrimination on the basis of sex has had an adverse effect on my administrative position.      | SA | A | U | D | SD |
| (3.) Contemporary legal structure regarding women has become a deterrent on co-workers' attitudes toward me as an administrator. | SA | A | U | D | SD |
| (4.) Intellectual achievement of women is viewed as competitively aggressive behavior.   | SA | A | U | D | SD |
| (5.) Marriage is an asset for women administrators in higher education.  | SA | A | U | D | SD |
| (6.) If married, your husband's attitude toward your position is favorable.  | SA | A | U | D | SD |
| (7.) Women have as much need to achieve as men do.   | SA | A | U | D | SD |
| (8.) Women administrators have difficulty supervising men.   | SA | A | U | D | SD |
| (9.) Women have more difficulty supervising other women than they have supervising men.  | SA | A | U | D | SD |

(continued)

- |   | 1  | 2 | 3 | 4 | 5  |
|---|----|---|---|---|----|
| (10.) Women have unique qualities to bring to administration. | SA | A | U | D | SD |
| (11.) You are satisfied with your administrative performance. | SA | A | U | D | SD |

B. What advice would you offer a woman who seeks a top administrative post in higher education in North Carolina four-year institutions?

- (1) Acquire academic credentials and experience.
- (2) Work hard and learn to work with people.
- (3) Study negotiation, law, etc.
- (4) Be assertive.
- (5) Other (Specify) \_\_\_\_\_

Your participation is deeply appreciated.

Please return the completed form immediately to Mrs. Lucille J. Piggott, 801 Cambridge Street, Greensboro, North Carolina 27406 (Telephone: 919- 274-1842).

THE UNIVERSITY OF NORTH CAROLINA  
AT GREENSBORO

School of Education

April 9, 1979

Recently we sent an information request form to you as a woman administrator in a four-year North Carolina college or university. A large number of administrators have been able to help with this important research project by sending in their responses. If you were one of them, this is our way of saying, "Thank you."

In case you were away or too busy to complete the information request before, may we ask you to do so now? It should take less than twenty minutes to complete the form. Your response is very important to the accuracy of our survey of North Carolina women administrators in higher education institutions. We will appreciate your earliest reply.

Of course, answers will be used only for developing a statistical presentation with related summaries and analyses in a doctoral dissertation, and your answers will be held in strict confidence.

Thank you for your participation and for your willingness to give time to the survey.

Very Sincerely yours,

(Mrs.) Lucille J. Piggott, Doctoral  
Candidate in Educational Administration

Donald W. Russell, Adviser  
Professor of Education



## TOPICS PURSUED DURING INTERVIEWS

1. Do you believe there should be more women administrators? If so, why? If not, why not?
2. What is the greatest catalyst for advancement by women administrators?
3. What do you consider to be the greatest barrier to advancement by women administrators
4. As a woman administrator, do you view the administrative climate to be different from what it has been in the past? To what do you attribute possible changes?
5. Do you believe that we behave on the job as we do because we are women or because of the structure and promise of the job?
6. If you could re-cast your career pattern, would you make changes? If so, identify them, please.
7. Are you aware of the need by prospective women administrators to have your support, advice, and encouragement? If so, through what medium can you deliver these items?
8. How does the future look for women administrators in education? Explain, please.

APPENDIX C-NAMES AND ADDRESSES OF NORTH CAROLINA INSTITUTIONS WHOSE WOMEN  
ADMINISTRATORS RECEIVED THE INFORMATION REQUEST

NAMES AND ADDRESSES OF NORTH CAROLINA INSTITUTIONS WHOSE WOMEN

ADMINISTRATORS RECEIVED THE INFORMATION REQUEST

| <u>Name</u>                                      | <u>Location</u> |
|--|-----------------|
| 1. Appalachian State University                  | Boone           |
| 2. Atlantic Christian College                    | Wilson          |
| 3. Barber Scotia College                         | Concord         |
| 4. Belmont Abbey College                         | Belmont         |
| 5. Bennett College                               | Greensboro      |
| 6. Campbell College                              | Buies Creek     |
| 7. Catawba College                               | Salisbury       |
| 8. Davidson College                              | Davidson        |
| 9. Duke University                               | Durham          |
| 10. East Carolina University                     | Greenville      |
| 11. Elizabeth City State University              | Elizabeth City  |
| 12. Elon College                                 | Elon College    |
| 13. Fayetteville State University                | Fayetteville    |
| 14. Gardner Webb College                         | Boiling Springs |
| 15. Greensboro College                           | Greensboro      |
| 16. Guilford College                             | Greensboro      |
| 17. High Point College                           | High Point      |
| 18. Johnson C. Smith University                  | Charlotte       |
| 19. Lenoir-Rhyne College                         | Hickory         |
| 20. Livingstone College                          | Salisbury       |
| 21. Mars Hill College                            | Mars Hill       |
| 22. Meredith College                             | Raleigh         |
| 23. Methodist College                            | Fayetteville    |
| 24. N. C. Agricultural and Technical State Univ. | Greensboro      |
| 25. North Carolina Central University            | Durham          |
| 26. North Carolina School of the Arts            | Winston-Salem   |
| 27. N. C. State University at Raleigh            | Raleigh         |
| 28. N. C. Wesleyan College                       | Rocky Mount     |
| 29. Pembroke State University                    | Pembroke        |
| 30. Pfeiffer College                             | Misenheimer     |
| 31. Queens College                               | Charlotte       |
| 32. Sacred Heart College                         | Belmont         |
| 33. Saint Andrews Presbyterian College           | Laurinburg      |
| 34. Saint Augustine's College                    | Raleigh         |
| 35. Salem College                                | Winston-Salem   |
| 36. Shaw University                              | Raleigh         |
| 37. University of N. C. at Asheville             | Asheville       |
| 38. UNC-Chapel Hill                              | Chapel Hill     |
| 39. UNC-Charlotte                                | Charlotte       |
| 40. UNC-Greensboro                               | Greensboro      |
| 41. UNC-Wilmington                               | Wilmington      |
| 42. Wake Forest University                       | Winston-Salem   |
| 43. Warren Wilson College                        | Swannanoa       |
| 44. Western Carolina University                  | Cullowhee       |
| 45. Winston Salem State University               | Winston-Salem   |

## BIOGRAPHICAL SKETCH

Lucille Cornelia Johnson Piggott was born in Alton, Illinois, on April 11, 1925. She was graduated from Alton Senior High School in June, 1942, and received her Bachelor of Science Degree in Business Education, Summa Cum Laude, from North Carolina Agricultural and Technical State University, at Greensboro, in 1954. In 1966, she was awarded the Master of Education Degree from the University of North Carolina at Greensboro, majoring in Business Education. Prior to entering the doctoral program at the University of North Carolina at Greensboro, she was Dean of Women at North Carolina A. and T. State University. During the time of her study, she became Dean of Students for Organizations and Student Development. She is a member of Pi Omega Pi, Delta Pi Epsilon, Phi Delta Kappa, Alpha Chi, Alpha Lambda Delta, Kappa Delta Pi, Delta Kappa Gamma and Alpha Kappa Mu. She is the wife of Dr. Bert Piggott and the mother of Bert, Jr.