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CAREER NETWORKS: THE USE OF PERSONAL AND PROFESSIONAL RELATIONSHIPS BY WOMEN ADMINISTRATORS IN THE UNIVERSITY OF NORTH CAROLINA SYSTEM

*The University of North Carolina at Greensboro*          ED.D.          1985

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CAREER NETWORKS:  The Use of
Personal and Professional
Relationships by Women
Administrators in the
University of
North Carolina System

by

Mary R. Cannie

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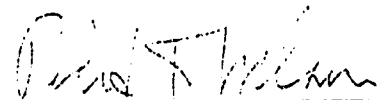
The primary focus of this research investigated how women in academic administration used their personal and professional relationships, networking, for job acquisition and as a career advancement tool. The study examined the specific network characteristics used by women in top-level and middle-level administrative positions and delineated the similarities and differences in the networks of each hierarchical group. Findings explained the impact administrative level had on the perceptions, development, and usage of career networking by women in academe.

The final sample consisted of 119 women (17 top-level administrators and 102 middle-level administrators) who were employed in the University of North Carolina system during the 1984-85 academic year. Eighty-eight administrators noted that they used personal and professional relationships in acquiring administrative posts. No other method of job acquisition was rated nearly as high as the reliance on network relationships.

Data were gathered from a research questionnaire developed by the author. Descriptive statistics, i.e., Frequency distributions, tests of association, measures of central tendency, and measures of variability, were used to analyze the data.

Based on research conducted by Israel (1982) and Mitchell (1969) which identified social network characteristics, eight characteristics were selected as being applicable to the career networking process. Although some basic similarities were noted in the structure of women's career networks, findings generally indicated that women in top-level

and middle-level administrative positions used the networking process differently. Differences were found in the intricacies of network structure, the nature of the linkages between the administrators and network members, the function and purposes network memberships served, and the types of networks to which women at each hierarchical level belonged. The major finding of this research was that administrative level did have an impact on the usage of the networking process by women in academic administration and how they used networking as a career advancement tool.

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CHAPTER I

INTRODUCTION

The 1980s is a significant period in the lives of American women. Women are pursuing careers outside of the home in ever increasing numbers. Welch (1981) reported that 42.4% of all American women are in the work force, and many career minded women are making a conscious attempt to acquire those positions which traditionally had been open to men only.

A specific goal for many women, who had been successful in obtaining lower echelon administrative positions, was to seek out and to obtain those positions which were considered as middle- and top-level administrative positions within the organizational structure. Women had made some progress in obtaining middle-level administrative positions (Zeitz, 1983). However, researchers (Fulton, 1983; Gappa & Uehling, 1979; Hennig & Jardim, 1977), indicated that the acquisition of top-level administrative positions was much slower.

The basis for this study was the researcher's interest in how women were promoted through the organizational hierarchy. This study investigated how women gained access to career positions in top- and middle-level posts in academic institutions.

The process which examined how an individual developed, used, and functioned in relationships with others and allowed for sharing essential information is named "networking" (Welch, 1981). This study investigated how women in academic administration were involved in

networking and used network relationships to make certain career movements. It also investigated if women in top-level academic administrative positions used network relationships differently than women in middle-level academic administrative positions. The focus of this study was to assess how women administrators in the University of North Carolina system engaged in the networking process while acquiring their current positions.

Administratively, the University of North Carolina is composed of sixteen constituent campuses. Fifteen have traditional administrative structures. The sixteenth campus, North Carolina School of the Arts, offers both high school and college degree programs. Its administrative structure includes position titles which are affiliated with public and higher education. This study is only concerned with administrative roles associated with higher education.

## Research Questions

Some questions of concern regarding network involvement of women in academic administration were the following:

1. Do women in academic administration perceive themselves as being in established career network relationships?

2. What purposes do network affiliations serve for women in academic administration?

3. How extensive is their involvement in the networking process?

4. Which network characteristics are most pertinent to women in academic administration?

5. Is there a difference between the networks of women serving in top- and middle-level positions in the academic setting?

6.  What roles, if any, do men have in the career networks of women in academic administration?

7.  What, if any, are the identifiable barriers which prevent women from engaging in the networking process?

8.  Is there a difference between the flow of communication among network members of middle- and top-level women administrators?

9.  Does network participation increase a woman administrator's possibilities for career advancement?

## Statement of Need

Much of the women's studies research investigated the psychological and sociological phenomena which have an impact on women's lives and the way they define themselves as members of American society. Selected issues of study were concerned with the various roles women fulfilled and the ways they met various demands placed on them. These roles usually related to women as wives and mothers.

In recent years, many women have negated the cultural expectation that they function exclusively as wives and mothers and have sought careers outside the home. "Career women," as they are often called, are not only concerned with obtaining positions in formal organizations, but they are also concerned with the acquisition of positions which are sources of power and prestige within the organizational structure.

Very little research focused on the women working outside the home, and only a small percentage of this research pertained to women as administrators. Gappa and Uehling (1979) wrote, "Gaps in the available information about women administrators are numerous. Only a handful of studies have focused on women administrators" (p.41). The

need to answer questions regarding how women functioned as administrators and managers or what they expected from themselves and others after the acquisition of prestigious posts are secondary to answering questions regarding how women obtained their administrative positions and how they advanced through the administrative hierarchy. Using women in academic administration as the research focus, this study addressed this need. It provided general and specific knowledge regarding how women used their personal and professional relationships to acquire administrative positions and to develop career advancement strategies.

## Statement of the Problem

Various issues and problems were identified while assessing the role of women as academic administrators. Two problems were addressed in this study. Through the implementation of descriptive research methodologies this research investigated:

1. The nature and usage of career network relationships for women in academic administration.

2. The assessment of similarities and differences of career networks of women in top- and middle-level administrative positions and the manner in which these similarities and differences affected their career advancement.

These problems were closely intertwined. Problem one addressed general issues regarding the process used by women to identify desired career positions and the procedure used by women in their personal and professional relationships to acquire these posts. Problem two studied these issues specifically by delineating between the networks of top- and middle-level administrators. These findings were used to

assess career advancement strategies of women at both administrative levels.

## Significance of the Research

> Information about women administrators is sparse.... A complete assessment of the status of women administrators must await information about their particular assignments, <u>the methods by which they obtained their positions</u>, the length of time they have held them, and the factors that have influenced their success in obtaining positions and performing in them. (Gappa and Uehling, 1979, p. 45) (Underlining added by researcher)

Several significant points were identified in this research. It provided general information pertaining to women as administrators in the academic setting. The study addressed the problem of how women used personal and professional relationships in obtaining administrative positions thus adding to the limited knowledge of the methods women used in acquiring positions as administrators in the academic setting.

Much of the recent research on women in academic administration used personal interview—case study methodology, (Barrax, 1984; Ironside, 1982; Vincent, 1983). Gay (1981) stated that the purpose of the case study "is to determine <u>why</u>, not just what ... [it] suggests hypotheses which can be tested using another method of research" (p. 170). The findings and results of qualitative case studies served as a basis for conducting this research investigation. This study was classified as descriptive research because it was based on "the collection of standardized, quantifiable information from all members of a population or sample" (Gay, 1981, p. 159). As descriptive research, this study also provided a numerical data base for assessing some aspects of the role of women as administrators and the method by which

they acquired positions within the administrative hierarchy in an university setting.

## Hypotheses

Researchers (Leff, 1984; Morrison, 1983; Welch, 1981) concerned with women's issues indicated that involvement in the networking process was a positive career development tool. The research itself is concerned with three questions: (1) do women in academic administration use personal and professional relationships as a career advancement tool? (2) which characteristics of social networks are most applicable to their career networks? and (3) do all women in academic administration use the networking process similarly? These questions led to the development of seven research hypotheses.

Hypotheses developed were based on the social network characteristics which were addressed in the literature. These characteristics are discussed in detail in Chapter II (Characteristics of Career Networks).

Hypotheses tested were the following:

1. The higher a woman's position in academic administration, the more structure there is in her career network.

2. Women in top-level positions in academic administration have denser networks than women in middle-level administrative positions.

3. The higher a woman's position in academic administration, the more homogeneous are her network relationships.

4. Women in middle-level academic administrative positions have more multi-stranded network relationships than women in top-level academic administrative positions.

5.  The flow of information in the networks of women in top-level academic administrative positions is more reciprocal than it is in the networks of women in middle-level positions.

6.  The higher a women's position in academic administration, the more she relies on network relationships for the acquisition of information.

7.  Women in top levels of academic administration view networking as a more important factor in career development than women in middle levels of academic administration.

Plan of Study

Chapter III of this study, Research Methodology, explains in detail the procedures and methodologies employed while conducting the research. A broad overview of strategies and methodologies implemented during this project are described below.

Quantitative data were collected in order to test stated hypotheses. Administrators were identified based upon information gathered by University of North Carolina General Administration during September, 1983. By contacting the Director of Institutional Research on each campus, the names and positions of women serving in top- or middle-level administrative positions for the 1984-85 academic year were obtained. The population included all women serving in executive, administrative and managerial positions in the University of North Carolina system as these positions were defined in the Equal Employment Opportunity Guide - Technical Report 6 (see Appendix D). A survey developed by the researcher was used to collect data. Data were analyzed using descriptive statistics.

## Definition of Terms

Certain key terms are operationalized below as a means of defining how they are used in this study.

Career networks. A career network is the set of formal and informal linkages between individuals which provide an opportunity for giving and receiving information with others regarding a specific career or those careers which are closely affiliated with it.

Top-level administrators. Individuals holding position titles containing the terms of chancellor, vice-chancellor, associate vice-chancellor, assistant vice-chancellor, or dean (of an academic school).

Middle-level administrators. Individuals holding position titles containing the terms of director, coordinator, registrar, or dean (of a particular program).

Career development. The implementation of strategies which assist an individual with advancement and goal attainment in a chosen employment field.

Network structuredness. The level of structuredness in career networks is concerned with the ease with which administrators can identify specific individuals as members of their networks. Administrators who are able to identify specific persons as network members have highly structured networks. Administrators who are unable to identify specific persons have unstructured networks.

## Summary

There is a need for additional research on women as academic administrators. While current literature findings noted that women are acquiring some administrative positions, information is far from complete. Answers to many pertinent questions remain unanswered. This

research addressed the question of how women acquire positions as academic administrators.

Chapter I served to outline the purpose, significance and basic structure of the research project. In addition, it introduced the research questions and hypotheses on which the study focused and served as the basis for what was included in the remainder of the study.

Chapter II provides a review of the literature which pertains to women's issues and social networking.

Chapter III outlines the methodologies and procedures used in conducting the research.

Chapter IV presents a detailed analysis of demographic data on the research population.

Chapter V outlines the analysis of data on the structure of women's career networks.

Chapter VI presents the analysis of data on networking as a career advancement tool.

Chapter VII outlines conclusions, summaries, and recommendations for future research.

CHAPTER II

REVIEW OF THE LITERATURE

The literature review focuses on two major areas of research:

1. women's issues

2. networking.

Cumulatively, the literature reviewed undergirds the study of women administrators and their use of personal and professional relationships theoretically and practically. Subsumed under each major area of focus are several topics which helped to clarify the preceptions and concerns of researchers investigating these areas.

Part I: Women's Issues

Legislation passed during the 1960s promoted the hiring of minorities and women. Executive Orders 10925, 11114, and 11246 ensured employers taking "affirmative action to promote equal employment opportunities" (Travis, 1976, pp. 50-51) in companies having federal contracts. The federal Civil Rights Act of 1964, through the implementation of Title VI, Title VII, and Title IX sought to eliminate discrimination based on sex, race, and ethnicity in the corporate and higher education settings.

Despite federal legislation and activities related to the women's movement, discrimination against women continued. Hennig and Jardim (1977) made an important point regarding the impact of legislation on the acceptance of minority groups. They wrote:

'You can legislate against segregation but you cannot legislate integration.' In other words, saying a person cannot be kept out doesn't ensure that that person can get in, and more important[sic], stay in. Beliefs, attitudes and assumptions which people have about themselves and each other and their resulting willingness or unwillingness to accept each other are untouched by law. (p. 14)

Richmond-Abbott (1983) stated that sex stratification had existed so long and was so widespread that "it must be 'natural' and therefore is the way that things should be ... [but]... this difference is not at all 'natural.' Nor is it a difference that would be fruitful to continue in the future" (p. 2).

In 1975, Epstein noted, "the culture of a society normally dictates how any goal may be achieved, the form it should take ... and who may seek the goal" (p. 1). She emphasized that American women have been taught to feel that they are behaving inappropriately if they set the same goals as men and attempt to reach goals in those manners that are traditionally open to men. Women and men prize the same goals, but the culture dictates what is appropriate for one sex or the other.

Moore and Sagaria (1981) described "two struggles" which women faced in American society. The first struggle was the quest to achieve equal access and opportunity as women, and the second struggle was women's effort to acquire positions of leadership in all facets of the society. Meeting the "second struggle" mandated that women realize the existence of psychologial and sociological barriers, many of which were rooted in myth and served as obstacles to procuring leadership positions.

## Myths and Barriers

Tibbetts (1976b) pointed out that women often chose to be inferior to men. This was not because women were inferior but because they (a) had been taught to believe or felt they should be inferior to men, (b) did not wish to appear "unfeminine," (c) were not fully aware of their situations and were not cognizant of their second class citizenship, and (d) did not understand that they had legitimate complaints about their roles in life.

Zeitz (1983) also found that masculine characteristics were more valued than feminine characteristics, thus causing women to judge themselves as inferior to men. She observed that given identical situations men saw their performance as better than women saw theirs. Men credited their success to ability, whereas women credited their success to luck.

Women often feared or avoided reaching their maximum potential because of the negative effect on interpersonal relationships. Successful women were often viewed as deviant and asexual (Tibbetts, 1979a). Women who were judged as aggressive, assertive, and independent were categorized as being less feminine, thus endangering their social and personal relationships, especially heterosexual relationships.

Studies conducted by Horner in 1965 and 1968 focused on fear of success levels in women. Using male and female college students in her sample, Horner hypothesized that the motive to avoid success was more significant in women than men and that the characteristic was higher in high achieving women than women with low ability or achievement levels (In Horner, 1975). In comparing results of male and

female students on the Thematic Apperception Test, Horner concluded that males expressed positive feelings and outlooks about future success. Females, however, cited responses which signified that excellence in women was clearly associated "with a loss of femininity, social rejection, personal, and societal destruction" (p. 22). The research results also indicated that females with high fear of success levels performed at significantly lower levels in mixed gender competitive situations.

Hoffman (1974) replicated Horner's research, reaching similar conclusions.

Bradwick and Douvan (1972) researched ambivalence. It was defined as the "simultaneous enjoyment of one's feminine identity, qualities, goals and achievements and the preception of them as less important, meaningful or satisfying than those of men" (p. 56). The authors attributed ambivalent behavior to women's needs to seek satisfaction from others which ultimately enhanced their self-concept and self-esteem.

Epstein (1970) described ambivalence as a set of contradictory cultural and value laden images which were incompatible. Stress, created when women pursued the professional role, heightened when combined with cultural definitions of accepted feminine roles.

Rossi (1971) researched the repression of ambivalent feelings. She concluded that the more critical the societal role the greater the likelihood that ambivalent feelings were repressed. Therefore, women who had been socialized to accept the feminine roles of wife and mother might have negative feelings about functioning in those roles, but these feelings were rarely displayed or verbalized. As with the

aforementioned researchers, Rossi found that, for women, values which stemmed from the mother/wife role and the professional role caused conflicting feelings for women which were directly related to cultural expectations.

## Social Stratification

Collins (1971), Epstein, (1970), Janeway (1971), Richmond-Abbott (1983), and Tibbetts (1979b) viewed sex stratification as a barrier which prohibited women from acquiring leadership positions. Crosby (1984) explained that sex stratification was carried forth by "good, decent people whose actions are supported by a traditional society, yet who fail to imagine how their own pursuits may perpetuate the inequalities women face" (p. 69).

Many women in the work force were victims of sex stratification as Collins (1971) noted when he wrote, "Employment discrimination on the basis of sex is widespread [which is evidenced by the fact that] women are concentrated in the lowest ranking positions of the work force" (p. 3).

Stratifying work according to gender served to control who could or could not acquire certain jobs. Work requiring a helping, nurturing, empathizing, expressive, and person oriented nature was generally classified as women's work (Epstein, 1970; Oppenheimer, 1975). Work viewed as needing analytic objectivity, object-orientation, detachment, and physical prowess was acceptable as men's work (Epstein, 1970). Individuals were expected to aspire toward those jobs which society deemed appropriate for their gender. Therefore, women attempting to obtain jobs which were sex typed as men's jobs were viewed as socially deviant.

Epstein (1970) identified the cultural implications for maintaining sex stratification in the professional work environment. She wrote:

> Anywhere that men and women are together without supervision or control, the potential for a socially unacceptable love and/or sexual relationship is present. The occupational sphere is certainly one of these potential trouble zones.... [I]t is not surprising that the highest stratum of occupations--the professions--is so strongly sex typed. The threat to marriages of men and women who work in intimate contact with members of the opposite sex who are not their spouses probably contributes to and is reinforced by cultural feeling(s). (p. 165)

Many women chose to ignore the realities of sex stratification as it prevails in their personal and professional lives. Crosby (1984) noted that "admitting [that it existed could make] a woman downright angry ... [and] Expressing it [might] risk serious reprisals" (p. 68).

## Life Cycle Implications

Defined "as an organizing principle" (Goodfriend & Christie, 1981, p. iii), life cycle study is a method "of conceptualizing the aging process [as] a sequence of statuses and roles, expectations and relationships" (Van Dusen & Sheldon, 1976, p. 108) affiliated with a particular age group. For women, perhaps the most important aspects of the life cycle were those roles associated with the family. Women's career choices were often defined and delimited by responsibilities which related to family roles and the rearing of children.

Many employers believed women placed responsibilities for home and children before those affiliated with activities outside the home (Collins, 1971). Several researchers, (Benton, 1980; Fraker, 1984; Palley, 1979; Schwartz, 1984; Swoboda & Vanderbasch, 1983) investigated the conflict between the mother/wife role and the career role

for women in their research. The family unit was viewed as "the emotional control task center of the society" (Epstein, 1970, p. 112) with homemakers (women) as its focus. Epstein concluded, "It is often asserted that if [women were] as deeply involved as [men] in an occupation, the system would come under additional strain and the family would suffer" (p. 112).

Family cycle responsibilities had a direct influence on women acquiring executive positions. Oppenheimer (1975) wrote, "Employers [do] not want to have women as executives [because] it is desirable that this group shall have as little turnover as possible. Too many women are likely to marry and leave the job" (p. 321), thus time, training, and resources were potentially lost.

Ezrati (1983) tied sex discrimination and life cycle implications findings to women in the academic setting. She wrote:

> many institutions of higher education seem to have taken a
> position that, while superficially supportive of the elimina-
> tion of sexist discrimination fails to take account of the
> relationship between personnel policies and the probable
> success of family women in academic positions. (p. 105)

She found that academic rank was affected by sex and marital status. Married women received fewer institutionalized rewards than men or single women. The level of rewards was further decreased when the women had children.

The preceding discussion highlighted some of the sociological and psychological barriers and myths which prohibited women from moving into the work force and acquiring administrative positions. However, many women did in fact seek careers outside the home and did manage to achieve positions of responsibility and prestige. The focus of the

following section of the literature review is on issues related to women in careers.

## Career Development Patterns

How women engaged in the career development process was the focus of several research projects. Adams (1972) outlined a five-stage model on career development which was anchored in the decision-making process. The model included the following stages:

1. The Decision stage focused on women making the decision to pursue a career rather than a job.

2. The Investment stage focused on women deciding on the level at which they could consider themselves successful. In making this decision, personal gratification was deferred in order to master professional skills and pursue professional goals.

3. The third stage, Integration, involved women balancing the material rewards of their positions with professional responsibilities.

4. The Consolidation stage focused on women assessing professional achievements and redefining goals. During this stage the meshing of personal and professional lifestyles and responsibilities took place.

5. In the final stage, Expansion, women had reached their professional goal and turned their attention to broadening the scope of their involvement in professional activities, i.e., acquiring seats on boards of directors, becoming mentors, and serving as consultants.

Hennig and Jardim (1977) studied and compared career development patterns in women and men. The authors found more differences than similarities in the way men and women viewed careers. Their findings are specified below:

1. Women made the conscious decision to begin a "career" about ten years into their working lives. Men never made such a decision. It was assumed from childhood that males would pursue a career or at least work as a means of supporting themselves and possibly a family.

2. Women related their work experiences passively rather than actively. They discounted their strengths and exhibited doubts and anxieties when describing themselves professionally. Men actively expressed what they did and achieved. They had no difficulties letting others know of their strengths, capabilities, or accomplishments.

3. Women emphasized individual self-improvement as a part of their career advancement. This indicated that women believed in the "effectiveness of the formal structure, formal definitions, roles, policies, and the way things should be" (p. 31). Most importantly, women did not realize the importance of the informal structure and relationships and the way things were.

4. Women viewed a job as "what one does day-to-day, nine to five, it has to be done, it is a means of survival, of earning a living" (p. 32). Jobs were not a part of career progression for women.

Men defined their career advancement "as a series of jobs, a progression of jobs, as a path leading upward with recognition and reward implied" (p.33). Thus women actively separated job from career; men viewed jobs as the stepping stones within career progressions.

5. Women separated their career and professional lives from their personal lives. Hennig and Jardim (1977) quoted an interviewee as stating, "My personal life is quite separate from my career and that is how I want it" (p. 36). Men did not make such distinctions. "They see one [personal and professional lives] as dependent on the other and

they try to negotiate and to trade off between each set of goals when conflict threatened the balance" (p.36).

Women made this distinction because psychologically they were attempting to handle both "lives" simultaneously. This psychological juggling allowed women to lessen guilt they felt for working outside the home. The authors cited an interviewee, "'Given that the role I should accept is a woman's role, then I can only justify, rationalize, and explain taking on a different role if I'm so good at the woman's role that no one can question it, which then leaves me free to take on the rest'" (p.36).

6. Men viewed each job related experience as part of a personal strategy which included winning, achieving a stated objective or reaching toward a goal. The underlying question men asked was "What's in it for me?" Men were always concerned with those endeavors which pointed toward future possibilities.

## Mentoring

Another facet of career advancement was the mentor-protege relationship. From her interviews with 30 women administrators, Ironside (1982) concluded that mentoring was an important method of making contacts and breaking new grounds. Ironside explained the mentor's role as follows "[W]hen it came to the big breakthrough, the special chance, the decision to move from a less direct path into higher education, they [administrators] often needed help--and they got it" (p. 146) through the mentor-protege relationship.

McNeer (1983) viewed mentoring as a winning twosome where a seasoned or experienced person took a neophyte under his or her wing for the purpose of providing support, information, and counseling as a part

of career training, planning and advancement. She explained that the mentoring relationship was inevitable in career advancement for women:

> It is a fact of life in most organizations that many more people are qualified than can be admitted to the inner circle of leadership at any one time. Selection is necessary. The mentor is one link between the pool of qualified candidates and the inner circle. (p. 8)

"Women in higher education may have the greatest need for 'mentoring' ... [it offers] encouragement, guidance, support, and advocacy" wrote Kraft in a January, 1984 article in The Chronicle of Higher Education. In her assessment of support systems used by women college presidents, McGee (1979) found that 82% of the sample noted the mentor-protege relationship as a significant factor in their career advancement plans and accomplishments.

Phillips-Jones (1982) noted that mentor-protege relationships were reciprocal in nature. Both participants stood to gain from the encounter. The primary advantage for the protege was the provision of advice related to the pursuit of career goals.

Building on research conducted by Phillips-Jones (1982), Rawlins and Rawlins (1983) described the primary roles of the mentor as follows: "mentors teach, advise, open doors for, encourage, promote, cut red tape for, show the politics and subtleties of the job to, and believe in proteges, thus helping them succeed" (p. 116). They added that the mentor-protege relationship is "the most important strategy for climbing the professional ladder," (p. 116) and being involved in it is one of the most "potent career" (p. 116) boosts an individual can find.

Schockett (1984) investigated the impact of gender on the mentor-protege relationship. She found that men were reluctant to serve

as mentors for females because of the tendency for misconstruing the closeness of the relationship as having underlying sexual implications. Cross-gender mentoring for female mentors seemed to be less problematic.

Her findings did not support the common belief that women preferred women mentors. She concluded that women felt that female mentors provided positive role models, but the value of the relationship was equal to situations where men served as mentors for women.

Kraft (1984), Phillips-Jones (1982), and Wheatley and Hirsch (1984) addressed the negative effects of mentoring relationships. Each researcher emphasized the difficulty in withdrawing from the relationship. Wheatley and Hirsch in their article, "Five Ways To Leave Your Mentor," summarized that the mentor-protege relationship should be a temporary one. The nature of the relationship should not develop into one of dependencies.

These conclusions were also reached by Rawlins and Rawlins (1983). They noted that mentors tended to be 8 to 15 years older than proteges, and that the relationships tended to last from two to three years. The researchers stressed that "as proteges develop competencies, mature professionally, and assume their own responsibilities, the mentoring relationships realign themselves as peer relationships" (p. 116). This change is usually difficult for both the mentor and protege, and it is to the advantage of both to withdraw from the relationship gracefully.

## Barriers Incurred by Women Administrators

Jones (1982) focused her article, "Women in Educational Administration," on barriers women faced as they attempted to acquire upper

level positions in the administrative hierarchy. She identified two major forces which prohibited women from advancing administratively—external and internal barriers. External barriers were "associated with society's attitudes, systems and structures, while internal barriers were associated with women's personality conflicts (especially role conflict as wife, mother and career woman) and personal qualities associated with their sex" (p. 26). In summarizing, Jones (1982) noted a link between external and internal barriers. External barriers were sanctioned and enforced by others in the community, and they were taken personally by some women. Thus, this led to internalization of the external barrier, causing the women to feel rejected and disheartened.

<div align="center">Women in Administration</div>

## Affirmative Action

Discrimination against women in the work environment was often hampered by the lack of support of affirmative action programs. These programs were often met with resistance from the highest levels of the managerial hierarchy. Safran (1984) found that implementation of affirmative action programs lay with the chief executive officer. She summarized:

> The key to success in affirmative action is the commitment of the chief executive officer. If the CEO is lukewarm, the program will flounder. If the CEO really wants it to work, the middle manager will see that it does. (p. 99)

Conclusions reached by Travis (1976) in his article "Affirmative Action on Campus: How Firm the Foundation?" were similar to those stated by Safran (1984). With a focus on institutions of higher education, Travis wrote, "Affirmative Action's future in higher education rests on legally motivated compliance; rather, its fate is

dependent on compliance by consensus. [T]his element of consensus seems to be lacking" (p. 55).

## Women As Administrators

As organizational managers, women were faced with the realities of sex stratification in the work place; they were slotted into specific types of managerial positions. For example, Collins (1971) stated that women took orders from men, but they did not give men orders; women did not supervise or manage areas where they were superordinate to men. In his study of organizational managers, Collins found that women almost exclusively served in managerial positions that (a) hired many women or (b) had large secretarial pools where women needed to be supervised.

Oppenheimer (1975) concluded from her literature review of women serving as supervisors of mixed gender work groups that "there appears to be a fairly widespread belief that it is best not to have women as supervisors" (p. 319). Both men and women preferred male superiors and found it easier to accept instructions from men than women.

Researchers and speakers on women's issues (Adams, 1979; Barrax, 1984; Coffey, 1983; Harragan, 1977; Kim & Carew; Johnson & O'Brien, 1982; Piggott, 1979; Vincent, 1983; Weddington, 1983) identified various skills which women needed to master if they were to achieve success as organizational administrators. Following is a composite list of the skills which appear continually in the literature on women in leadership positions. Generally it was felt that women must:

1. be risk takers

2. seek out and cultivate relationships with individuals who can serve as positive role models

3. understand the formal and informal structure of the organization in which they work

4. demonstrate an ability to work on "the team" and engage in healthy competition

5. demonstrate assertive behavior which is not offensive or viewed as negatively aggressive or overbearing

6. demonstrate expert knowledge of current trends in their field

7. develop superior communications skills

8. understand the decision making process and express confidence in their decisions

9. keep emotionalism at a minimum--face facts with facts, not emotions

10. be realistic about their abilities and competencies

11. engage in continual self-assessment

12. demonstrate independence and self-assurance.

The literature supported the fact that mastery of managerial skills did not eliminate many of the problems women administrators found in their day-to-day work situations. In addition to sex stratification, many administrators felt that they received little support from other women. Tibbetts (1979b) suggested that it was the responsibility of women to improve their positions in society. However, through her review of the literature on how women learn sex roles and the attitudes of women toward each other, Tibbetts found that women, more so than men, were less supportive of women who

disregarded or attempted to break away from the traditional women's roles.

In their analysis of the "Queen Bee Syndrome," Berry and Kushner (1979) described the "Queen Bee" as a woman executive who was rewarded for denigrating the efforts of other women. "Queen Bees" were successful in their work and felt that they had reached achieved levels of success without help from others. They concluded that since they made it as loners they should not offer help to other women who were attempting to acquire management positions. On the other hand, "Queen Bees" were given little or no recognition for their achievements and were "looked down on" by other women for their accomplishments.

In her fear of success studies, Horner (1965) found that women feared reprisals from other women as well as from men for breaking away from traditional female roles.

Warihay (1980) discovered that women in the upper levels of administration believed that they provided support to women in lower levels of administration. However, as Warihay double-checked this assessment with women in the lower levels of administration, she found a difference in perception. Women in lower level positions did not feel that the senior level women were available or supportive to assist with career advancement attempts.

## Salary Differentiations

Another general area in which women found discrimination was salary range. Harragan (1977) reported that on the national average men earned twice as much as women. Although the difference decreased

in the professional arena, women continued to earn two-thirds of what men earned for doing the same job. Safran (1984) cited that women as a group earned 62¢ for every dollar men earned (p. 101).

Zeitz (1983) studied problem solving abilities of administrators who were identified as highly promotable by their superiors. The sample consisted of 42 women and 26 men who were comparable in age, education level, time with companies, time working in the field, time working in current position, and the number of people managed. Zeitz found that males earned significantly more than women. She concluded that salary level influenced behavior in the work environment. Higher paid people (men) behaved with more confidence. Lower paid people (women) tended to underestimate their problem-solving ability and were less likely to disagree with others or volunteer information.

Crosby (1984) matched her sample of 182 men and 163 women corporate managers in relations to background, job status, motivation, and job satisfaction. Matching indicated more similarities than differences between the groups; yet, men earned $8,000 to $10,000 more than women on an annual basis.

Although the differentiation in salary levels existed, women stated that they were treated justly in all aspects of their jobs--including pay. Crosby (1984) surmised that because women often had no way of double checking the salary scales, they had no idea of the inequities which existed.

Statistics reported in the January 18, 1984 edition of The Chronicle of Higher Education on base salaries for public and private academic institutions during 1982-83 revealed that women academicians

in North Carolina earned 84% of the salary of men.  The average

salary for men during 1982-83 was $24,802 and $20,824 for women.

## Conflict in Organizations

Green (1982) found that leadership positions in government,

business, and education had traditionally and conspicuously been held

by white men.  Women and minorities were obviously missing from the

managerial hierarchy.  As women acquired management posts, an element

of conflict was often introduced in the operations of the orga-

nization (Welch, 1981).  Men perceived women as a threat in the quest

for positions traditionally held by them.

Himes (1980) studied conflict and defined it as the "purposeful

struggles to defeat or remove opponents and gain status, power,

resources, and other scarce values" (p. 14) (underlining added by the

researcher).  Perception as defined by Purkey and Kovack (1984) is

"the differentiations a person is able to make in his or her personal

world of experience" (p. 24).  When the combination of conflict and

perceptual theories were applied to the organizational setting, it

was easy to discern how the hiring of women for managerial positions

created stress and caused some men to feel threatened.  Men tradi-

tionally held the positions of power and prestige--women were at-

tempting to acquire some of these positions as a means of gaining

status, power, and resources valued by men in organizational manage-

ment.

## Women in Academic Administration

Holt (1981) described colleges and universities as

"maleocracies"--institutions which were male dominated and patterned

on the athletic and military models which were unfamiliar to women.

This fact had a far reaching effect on how women operated as organizational managers.

In Games Mother Never Taught You: Corporate Gamesmenship For Women, Betty Harragan (1977) discussed the ramifications of women not knowing how organizations operated. She traced the lack of understanding to childhood experiences and expectations. Boys, for example, were expected to participate in team sports and learn the finer points of teamsmenship; girls were expected to engage in individual or couples play. When a third girl joined an activity, internal competition ensued. Young men joined the military and learned the patterns of organizational hierarchy, young women were expected to look for the "right man" to take care of them. Thus as women moved into the managerial hierarchy, their lack of exposure to military and athletic models, on which organizations were·based, served as a deterrent in the assimilation to administrative roles.

The ability to physically relocate was also noted as an important facet in career advancement. Fox (1977) stated that prohibiting women from moving freely excluded them from gaining "first-hand knowledge about the world and from developing skills and competencies for handling themselves in it" (pp. 812-813).

Moore and Sagaria (1981) found that most employers assumed that women were unwilling to relocate. Their study focused on assessing the willingness of female academic administrators to relocate for career advancement. In their study of 180 women in higher educational administration in Pennsylvania, the researchers found that the majority of the sample had built successful careers in one

institution. However, a fair percentage of them stated a willingness to relocate for job advancement.

Moore (1983) designed a research project, "Leaders in Transition," as a means of systematically analyzing administrative career development in academe. Her sample of 4,000 administrators was selected from four year colleges and universities. She reached several conclusions.

1. Institutions of higher learning tended to promote individuals from within the system rather than hire from outside.

2. Both males and females displayed an equal willingness to relocate in order to pursue advancement in academic administration. Women usually relocated to Liberal Arts II institutions (in accordance with the Carnegie code system of classification) and assumed middle-level posts, i.e., program directors.

3. Administrators tended to focus their work experiences in one particular type of institution, i.e., traditionally Black colleges, women's colleges, research universities.

4. The path to the highest levels of administration were not standardized. Top-level administrators had a wide variety of experiences and backgrounds.

Moore and Sagaria (1981) reached different conclusions regarding adherence to standardized patterns for moving into administrative positions. Based upon their literature review, the researchers concluded that men usually advanced into academic administration through the following standardized model and suggested that women should also adhere to this pattern. Men:

1. acquired the terminal degree

2. gained professional experience in a discipline

3. acquired tenure

4. acquired senior status in a department

5. became department chairmen

6. became dean/provost

7. became top-level administrators.

Barrax (1984) like Moore (1983) found that women did not advance in academic administration according to a standardized pattern. She found that the 15 male and 15 female upper-level administrators in her sample:

1. had served in a variety of higher educational related fields before becoming administrators.

2. felt their performance in lower-level positions had a major impact on their promotion to current positions.

Barrax studied strategies for success in career advancement in academic administration.

Ironside (1982) investigated the career paths of women administrators in North Carolina. She summarized that women entered higher education administration from a variety of career paths, e.g., public school teaching and administration, teaching faculty, lower levels of academic administration. The 30 women in Ironside's sample unanimously agreed that the earned doctorate was the key to advancement in academic administration. It was described as the "requirement for admission" (p.144) to administrative positions.

Based on the assumptions that women in academic administration were paid less, less likely to have tenure, and were more likely to work in non-Ph.D granting departments than men, Palley (1979) studied

equality in the access of women to academic administrative positions.
In comparing data from her sample of all alumni of the Academic
Administration Internship Program from 1965 to 1975, Palley found
that the study participants had acquired the following administrative
posts:

1.  fourteen men (8.3%) and 4 women (10%) were presidents or
    chancellors

2.  twenty-four men (14.3%) and 4 women (10%) were chief
    academic officers

3.  twenty-three men (13.7%) and 7 women (17.5%) were associate
    chief academic officers

4.  eighteen men (10.7%) and 2 women (.5%) were deans of
    schools and colleges

5.  seventeen men (10.1%) and 1 woman (2.5%) were vice presi-
    dents in non-academic areas

6.  seventy-two men (42.9%) and 22 women (55%) were directors,
    department chairpersons, and so forth or not employed in
    higher education.

She concluded that there was equality in the acquisition of high
level positions in the academic administration for women.

The willingness to relocate and accessibility to administrative
positions in and of themselves did not seem to be sufficient for
women to secure administrative positions in higher education. Fulton
(1983) investigated the role of search committees as a factor in
career advancement. By reviewing the procedures of 209 committees,
she found that a total of 10,274 persons applied for positions of
which 1,234 (12%) were women. Search committees recommended women

for 50.9% of the positions for which they applied. Thirty-one (17%) of these women were finally selected for positions. Fulton concluded that search committees were generally supportive of women candidates, but administrators did not follow through in making appointments.

Barrax (1984) noted that the women in her study believed search committees were instrumental in supporting their career advancement. The administrators felt they were judged by previous history of getting things done and their credentials rather than recommendations or social and personal characteristics.

Institutions of higher learning were classified as Professional Bureaucracies in Henry Mintzberg's 1979 book, The Structuring of Organizations. These organizations "rely on the skills and knowledge of their operating professionals to function" (p. 349). Despite many sources of conflict over power and authority, it is the chief executive officer "who is the most powerful member of the professional bureaucracy" (p. 363).

Moore (1983) wrote, "research on [academic] administrators centers upon accounts of personal experiences or analysis of one position, the presidency, from which knowledge about other administrative careers has been extrapolated" (p. 3).

The Chronicle of Higher Education (April 18, 1984) reported that 254 of 2,800 American colleges and universities had women presidents. This statistic represented an increase of 70% since 1976. Nine percent (9%) of the administrators were from minority groups. Two-thirds (2/3) headed private institutions and 1/3 headed public institutions. Institutions headed by women generally had a student population of less than 3,000.

Brady (1983) identified several characteristics of women college presidents. Her conclusions were based on statistics gathered by the College and University Personnel Association and personal interviews with five women presidents. She quoted the 1982-83 median annual salary for male presidents as $56,120 and $46,261 for female presidents. The presidents interviewed in Brady's study ranged in age from 32-40 years old, were married and had children. Women in the study served as chief executive officers in every kind of institution and "were 'significantly more likely' than men to have been teachers immediately prior to assuming the presidency. Finally, Brady suggested that women who wished to become college presidents needed "graduate degrees from a prestigious university and publication of a scholarly book that [was] well-received by critics and the academic community" (p. 157).

Benton (1980) compared women college presidents of the 1960s and 1970s to those of the 1980s. The earlier presidents tended to be single and conservative. They had limited social lives and did not marry before age 35. Presidents of the 1980s were married (85% had been; 50% were married at the time of the study) and 70% were mothers. Benton concluded that presidents of the 1980s were capable of resolving many of the family cycle conflicts earlier women presidents experienced.

Many similar characteristics were identified by Palley (1979) and McGee (1979) in their research on women college presidents. In addition, Palley concluded that women published less than men. The lack of professional publications prohibited women from obtaining positions in more prestigious institutions.

Piggott (1979) expanded her research to include administrators at various hierarchial levels in academic institutions in North Carolina. Based on a sample of 343 women holding hierarchial positions ranked above department chairperson, she found that women administrators generally:

1.   held at least a master's degree

2.   were at their institutions five years or more and had no plans to leave the field of higher education--thus demonstrating a sense of permanence and continuity

3.   entered academic administration between the ages of 21 to 35

4.   were married and had two children

5.   had an average salary of $17,913

6.   were recruited for their positions because of professional competencies

7.   reported sex discrimination as the number one barrier in their work environment.

## Summary

The literature review of women's issues revealed that many sociological and psychological barriers and myths exist in our society which prohibit women from viewing their roles beyond those which have been defined for them traditionally.

During the last decade, however, women have acquired positions outside the home and have moved into management in increasing numbers. This increase was noted in both the corporate and academic environments. However, very little research focused on the process

by which women acquired administrative positions or the methods by which they were promoted through the administrative hierarchy.

Women's ability to form viable personal and professional relationships with men and women was an important means of acquiring administrative positions and advancing in their careers. Involvement in the networking process was viewed as one important means of gathering information and support for women as they advanced in their careers. Following is a literature review on networking theory and research as it applied to women with careers in academic administration.

## Part II: Networking

This section of the literature review focuses on networking as a social process. Theoretical and practical research on the topic were reviewed from several perspectives: (a) defining the social network, (b) characteristics of social networks, (c) defining career networks, and (d) women's career networks.

### Defining the Social Network

Fischer (1977) stated:

Although network analysis is useful as a point of view or orientation, it is not very well developed as a rigorous analytical procedure. There is still little agreement on precise definition, the important feature of networks, how they change, and other similar issues. (p. 33)

Examination of operational definitions of social networks indicated commonalities as well as differences in how the process was defined. Mitchell (1969) explained:

They [researchers] therefore used the same basic set of ideas and postulates although each study in turn differs in the way in which these are used to interpret the field data. Each writer uses the concept as a means of eludicating some aspect of his field observation—however

different the particular problems were in which he was interested. (p. 7)

Barnes (1969) defined social networks as "processes whereby individuals and groups attempt to mobilize support for their various purposes and to influence the attitudes and actions of their fellows" (p. 52). In 1977, he refined his definition by describing the social network as an image of interrelationships. He summarized it as "a set of points, some of which are joined by lines. The points are people, or sometimes groups, and the lines indicate which people interact with each other" (p. 237).

Two important aspects of Barnes' definition were: (a) the idea that the network was anchored in either an individual or a group and (b) that the members of the network were interconnected to each other, thus allowing for a support foundation to develop and expand.

Also visualizing the social network as the interrelationship between people, Elizabeth Bott (1977) distinguished between the social network and the organized group. She wrote:

> In an organized group, the component individuals make up a
> larger social whole with common aims, interdependent roles,
> and a distinctive subculture. In network formation only
> some but not all of the component individuals have social
> relationships with one another. (p. 255)

Bott also highlighted the idea of interpersonal relationships among an identified set of individuals.

In Kapferer's (1969) opinion the social network could only focus on an individual. Referring to it as a reticulum, Kapferer defined the social network as "direct links radiating from a particular ego to other individuals in a situation, and the links which connect those individuals who are directly tied to ego, to one another" (p. 182).

Studying the social network as it related to the field of mental health, Israel (1982) defined the process as:

> person-centered and refers to the structure—links in the overall network, e.g., size; interaction—nature of the linkages themselves, e.g., frequency and intensity of interactions; and functions that networks provide, e.g. affective support, tangible aid, and services. Thus a social network referred to human interactions, some or all of which may or may not provide social support. (p. 65)

Pinpointing the social network as an individual focused phenomenon, Israel highlighted the component parts of the network itself as an entity in her definition.

Morrison (1981) simply defined the network as "a collection of acquaintances that managers can count on for some kind of help ... [having] two common characteristics: informality and purpose" (p. 1).

Mitchell (1969) defined the social network process as "a specific set of linkages among a defined set of persons, with the additional property that the characteristics of these linkages as a whole may be used to interpret the social behavior of the persons involved" (p. 2). Fischer (1977) noted that Mitchell's definition "probably seems best as a generally acceptable and useful definition" (p. 33) and identified its two major components as: (a) social actors—an individual, roles individuals or group play, or groups and (b) links—the total set of relations between any two actors. The two concepts, identification of a focal point and the interrelationship among network members, were crucial to defining the social network.

Fischer (1977) additionally stated that since all members of a community were ultimately related to one another either directly or indirectly, it was necessary for a researcher to specify which links

were of particular interest when defining the process. Three points

of specification: (a) total versus partial networks, (b)

metaphorical versus analytical study of networks, and (c) individual

versus multiple focal points were important to this study.

## Total Versus Partial Networks

Total networks "contain as much as possible of the information

about the whole of the social life of the community to which it

corresponds" (Barnes, 1969, p. 56). It permitted a researcher to

make broad generalizations about all links in the environment

(Mitchell, 1969). Kapferer (1969) and Mitchell (1969) commented that

the likelihood of one engaging in research which encompassed the

total environment was highly improbable. Therefore, network research

usually focused on small segments of the community, a partial net-

work. Barnes (1969) defined the partial network as "any extract of

the total network based on some criterion applicable throughout the

whole network" (p. 59). Research conclusions allowed insight into

interpersonal relationships which existed within the area of research

focus, i.e., careers, friendships, neighborhood. Thus generaliza-

tions about the total network system could be made.

## Metaphorical Versus Analytical Social Networks

Analytical network research was undergirded in graph theory

which Mitchell (1969) summarized as follows:

> In graph theory a finite set of points linked, or partly
> linked, by a set of lines (called arcs) is called a net,
> there being no restriction on the number of lines linking
> any pair of points or on the direction of those lines. A
> relation is a restricted sort of net in which there can
> only be one line linking one point to another in the same
> direction, i.e., there are no parallel arcs. A diagraph
> is a relation in which there are no loops, that is there
> are no lines which link a point back to itself directly
> without passing through some other point. A network in

graph theory is a relation in which the lines connecting the points have values ascribed to them, which may or may not be numerical. (pp. 2-3)

Excellent examples of studies employing graph theory were found in research conducted by Cartwright and Haray (1977), Davis (1977), and Heider (1977). These theorists investigated balance within groups and identified how interpersonal relationships were affected by possible pairing configurations among group members.

Metaphorical network study denoted an image which created an interconnection of social relationships among certain persons (Mitchell, 1969). Research conducted by sociologists and anthropologists frequently relied on metaphorical methodologies. Barnes (1977) and Bott (1977) in field observations on a Norweigian Parish Island and of conjugal relations in London families, respectively, served as examples of metaphorical research.

Mitchell (1969) discussed various research methodologies which lent themselves to metaphorical analyses of social network: (a) formal questionnaires, (b) field observations of both network participants and non-participants, and (c) personal interviews. He found that sociological and anthropological research on social networks was not purely metaphorical. Social researchers did apply some procedures of analytical research with a tendency toward metaphorical methodologies.

## Individual Focus Versus Multiple Focus Networks

The third area of specification in social network study was the focus on either a single actor, multiple actors, or an entire system. In multiple actors studies, the small group or clique was the point of reference; entire system network study concentrated on the

relationships which existed among all actors in a system (Burt, 1980). Single actor network studies focused on one entity and were classified as egocentric. Literature findings (Burt, 1980; Fischer, et al, 1977; Kapferer, 1969; Wellman, 1982) stated that this type of network operated well when its purposes and functions were expressed from one person's view point.

Burt (1980) identified several strengths of the egocentric network. First, because of the focus on a single entity, the ego-centric network accommodated survey research. Secondly, data were easily collected by distributing a standardized survey instrument. Thirdly, the egocentric network permitted coordination of relations which were diverse in content. The last strength noted was the egocentric network's propensity for testing hypotheses regarding intra-network relationships.

## Characteristics of Social Networks

Mitchell (1969) stated that "there seems to be no commonly accepted set of criteria which might be used to [distinguish] the characteristics of one type of network from another" (p. 10) and "there appear to be several morphological [or structural] and several interactional characteristics which are likely to be apposite in any attempt to describe social behavior adequately" (pp. 12-13). Mitchell developed a typology of those characteristics most often referred to in social network research. The morphological charac-teristics which he identified were: anchorage, density, range and reachability. These characteristics described the structure of the network. A second set of characteristics identified by Mitchell were labelled interactional. They focused on the nature of the network

linkages. The interactional characteristics were: content, directedness, durability, intensity, and frequency.

Building on Mitchell's work, Israel (1982) identified a set of functional network characteristics which described positive support mechanisms network memberships provided. Functional characteristics were: affective support, instrumental support, cognitive support, maintenance of social identity, and social outreach. She added two interactional characteristics to Mitchell's (1969) typology: dispersion and homogeneity, and she deleted anchorage and reachability as morphological characteristics.

Table 1 summarizes a composite listing of the Israel (1982) and Mitchell (1969) network characteristics.

Table 1

Social Network Characteristics

Morphological Characteristics

1. Anchorage: the reference or starting point of a particular network study, often called ego.

2. Range: the number of contacts ego has with an individual network member.

3. Density: the measure of the proportion of network members who know each other.

4. Reachability: the extent to which ego and network members can contact each other.

Interactional Characteristics

1. Content: the meaning ego attaches to network relation-ships.

2.  Directedness:  the level of reciprocity in the network.

3.  Durability:  the level of stability of the links among network members.

4.  Intensity:  the emotional closeness between network members.

5.  Frequency:  the number of interactions between network members.

6.  Dispersion:  the ease with which network members can contact each other, emphasizes geographic proximity.

7.  Homogeneity:  the degree to which network members have similar attributes.

## Functional Characteristics

1.  Affective support:  the provision of moral support, encouragement and caring.

2.  Instrumental support:  the provision of tangible aid and services.

3.  Cognitive support:  the provision of diverse information, new knowledge, advice and feedback.

4.  Maintenance of social identity:  validation of a shared point of view.

5.  Social outreach:  access to social contacts and social roles.

Based on the characteristics identified by Israel (1982) and Mitchell (1969), the researcher selected those characteristics which she felt were most applicable to the study of networking as it pertains to career-related issues.  The following section of the

literature review summarizes the theoretical and practical research findings for each of the underlined characteristics.

## Characteristics of Career Networks

In 1969, Mitchell wrote "No one study has taken into account all of [the social network] characteristics: one or another of the characteristics, rather, has been selected in one study as of major importance and another in a different study" (p. 30). Career networks (see Chapter I—Definition of Terms) are (a) partial networks which focused on career acquisition and advancement, (b) egocentric networks which focus on the perceptions of women in academic administration, and (c) more metaphorical than analytical. Network characteristics selected as most applicable to the study of career networks were: (a) morphological—anchorage and density; (b) interactional—content, homogeneity, and directedness; and (c) functional—affective support, instrumental support, and cognitive support. Following is a detailed discussion of each characteristic underlined as important to career network research.

### Morphological Characteristics

Anchorage. The point of reference in a network is called by various labels: ego (Kapferer, 1969; Mitchell, 1969) or focal person (Tolsdorf, 1976) or Alpha (Barnes, 1969). However, the consensus was that this person, role or group was the starting point of network study.

In this research entitled, "Social Density and Mental Health," Kadushin (1982) discussed interpersonal environment and defined it as "the set of all persons with whom the focal person directly interacts in some meaningful way" (p. 149). One's interpersonal environment

included from one to an infinite number of people. Kadushin conclud-
ed that network study must focus on a particular person and segment
of the environment which will limit both the size and perceptions of
the network study.

An important aspect of anchorage was the nature of direct and
indirect relationships ego has with network members. Persons who
were directly tied to ego were members of her primary star or first
order star (Barnes, 1969) and formed a ring around the focal person
(Kadushin, 1982). The interconnection of primary star members was
labelled as the primary zone. Ego's secondary star, "persons con-
nected by two steps to ego" (Mitchell, 1969, p. 14) was composed of
those persons who were primary star members of one of ego's primary
star members. If ego wished to reach a member of her secondary star
or zone, she did so by contacting a member of her primary zone.
Mitchell summarized, "it will seldom be necessary to go beyond the
second zone [star] to trace influences on the behavior of individu-
als" (p. 14).

Welch (1981) noted that network affiliations were not permanent;
relationships existed as long as they were needed and changed as
ego's needs changed. She cited, "a sign of health in [career
networking] and the increasing business-sophistication of the women
involved in it, as the way members choose to move on from one network
to another "(p. 312) as a means of finding a group which meets
individual needs at any point in time. Therefore, Welch concluded
that when a network disbands, or changes in its internal structure
took place, the network displayed a sign of health. It served its
purpose rather than exhibited a lack of its success.

Figure 1 presents a visual conceptualization of a career network as defined in this study. It was labelled as a <u>primary order</u> network because it was only concerned with direct relationships ego had with members. Concentric circles were used to identify various levels of assistance members provided ego. The more assistance provided, the closer the relationship between ego and network members. The concentric circles were opened to signify the potential for change in network structure—persons joining the network, resigning from the network, or changing their position within the network. Anchorage in career networks focused on: (a) identification of ego, (b) size of networks, (c) ethnic and gender composition of networks, (d) types of assistance provided, and (e) level of relationships after job acquisition.

<u>Density</u>. Density measured the "extent to which links which could possibly exist among persons do in fact exist" (Mitchell, 1969, p. 18). The level of density was calculated by the formula:

$$100 \text{ x } \frac{Na}{N(N-1)/2}$$

where $Na$ = the number of actual links and $N$ = the total number of persons in the reticulum (partial network ) (Kapferer, 1969).

In his study of social class in a Norwegian Island Parish Barnes (1977) described density as "the distance round a hole the network" (p. 238) which he termed small mesh and large mesh—the latter described many network members knowing each other while the former described networks where few members know each other.

Elizabeth Bott (1977) studied twenty urban families in London focusing on connectedness (her conceptualization of density). She defined it as the "extent to which the people known by a family know
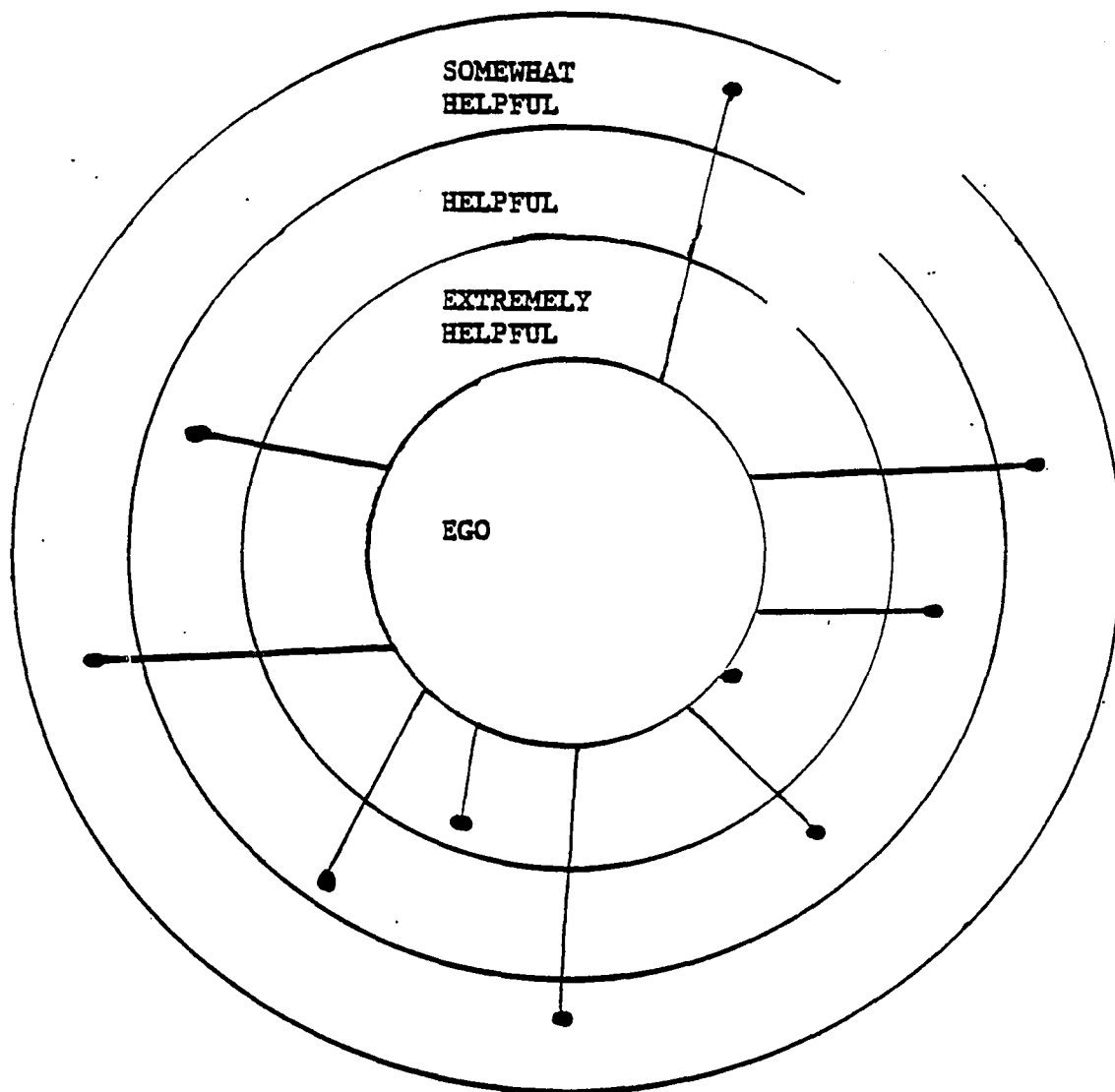
Figure 1. Primary Order Representation of Ego's Career Network

CONCENTRIC CIRCLES  --  represent levels of network involvement
                        within the primary order.

STRAIGHT LINES      --  represent linkages between ego and
                        members in the primary order network.

DOTTED CIRCLES      --  represent network members.

and meet one another independently of the family" (p. 256). To distinguish between levels of connectedness, Bott called situations where there were "few relationships amongst the component units" (p. 256) disperse networks and situations where there were many relationships among the units highly connected.

In 1969, Barnes expressed a concern regarding Bott's usage of connectedness but stated that he believed it corresponded to his usage of mesh. Bott (1977) agreed that the term connectedness caused confusion and that density was probably a more appropriate term for describing interconnections within the group. She substituted the terms disperse and highly connected with loose-knit and close-knit, respectively, and coined density to describe the overall concept.

Research conducted by Mark Granovetter in 1973 on the strength of relational ties among network members addressed two types of network relationships and identified two types of ties--strong (friends) and weak (acquaintances). He concluded that the strength of relations among network members influenced the amount and type of information to which an individual had access. The more weak ties an individual had, the more information was perceivably available to him. Acquaintance relationships allowed an individual to tap into the information sources from each acquaintance's strong ties. Friends, strong ties, were generally more tightly interconnected to each other; they were privvy to the same information because of the lack of mechanisms for allowing new information into the group.

Wellman (1982) questioned the emphasis on density research. In his study of community analysis, he summarized:

> Density ... is an ambiguous variable because networks with
> the same density value may have markedly different

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structural forms ... density statistics reveal the amount
of connectivity within the overall network, at intermediate
values it gives poor information about network structure.
(p. 69)

As did Wellman (1982), Granovetter (1973) studied the ties that

connected network members. He found that

ties often are neither egalitarian nor reciprocal, they can
be important in terms of time spent on them, the resources
that flow through them, the way they constrain other
network members' activities, and the indirect access they
give to other relationships. (p. 79)

Fischer (1982) viewed the impact of density more positively than

Wellman (1982) and concluded that it was a key activity in people's

networks. He found that the more diverse an individual's sphere of

activities, the less dense the network. Focusing on community

studies, Fischer wrote that "urbanism reduced density" (p. 147)

because residents had the opportunity to meet more heterogeneous and

disperse populations.

Interactional Characteristics

Homogeneity. This network characteristic involved identifying

similarities among network members (Wilson, 1983). Breiger (1982)

studied homogeneity as an aspect of occupational mobility and iden-

tified two types of homogeneity--external and internal. External

homogeneity pertained to the relationship between occupational

categories while internal homogeneity corresponded to similarities

within a group. The conceptualization of sameness within a group was

important to understanding the career network--as the likelihood that

certain common attributes in women administrators promoted career

advancement possibilities.

Using age and occupational status as variables, Fischer (1977) measured homogeneity among friends. He concluded that people tended to choose people similar to themselves as friends.

Barnes (1977) reported that the people of Bremnes were paired homogeneously. He wrote, "[in] the system of ties between pairs of persons ... [they] regard each other as approximate social equals" (p. 238). In other words people tended to pair off with those persons most like themselves.

Variables applied to the measures of homogeneity for women's career networks were age, social background, and career background.

Content. Fischer (1982) stated that content was the number of different relationships ego had with an individual network member. Relationships were specialized, uniplex or single-stranded when ego had one connection with a network member. In mutli-stranded, multiplex or many-stranded relationships, ego and network members were tied to each other in two or more ways, i.e., teacher/student relationship and employer/employee relationship and member of the same civic organization (Fischer, 1977; Kapferer, 1969; Mitchell, 1969; Wilson, 1983).

Kapferer (1969), Mitchell (1969), and Wheeldon (1969) agreed that multiplex relationships were more secure than uniplex relation-ships. Mitchell explained that if people were connected mul-ti-strandedly they were not able to withdraw from all ties and relationships simultaneously; thus, multi-tied relationships were generally more strongly bonded than uniplex relationships.

Cook (1982) studied strandedness as a facet of exchange among network members. Agreeing with Israel (1982) and Mitchell (1969),

Cook viewed the merge of different content relationships as multi-plex. She differentiated between the levels of "primacy" in exchange relations, defining it as an "index of the extent to which the relation mediates a variety of valued outcomes and has few if any alternatives" (p. 179). Thus the level of primacy depended on the range of outcomes and "the number of alternative sources of those valued outcomes" (p. 179).

Directedness. Israel (1982) and Mitchell (1969) defined directedness as the network characteristic which specified the level of reciprocity within the network. Israel focused on "the extent to which affective and instrumental aid are both given and received within an individual's network" (p. 67). Mitchell focused on situations where both parties equally shared the responsibility for the relationship. He noted that in situations where "the link between the two is essentially a directed one," (p. 24) one person in the relationship had more power and influence than another, i.e., parent/child or employer/employee relationships. Mitchell reasoned that some relationships were clearly reciprocal while others were not; thus, "the influence of one person on the other will differ according to the direction of the interaction" (p. 25).

Directedness, as it related to career networks, focused on the flow of communication and information between ego and network members. Two types of uni-direction informational flows were identified: (a) from ego to network member and (b) from network member to ego. Reciprocity in the flow of information was also assessed.

Functional Characteristics

Affective support. Wilson (1983) defined affective support as

"those [attributes] which are established and maintained primarily for satisfaction of emotional and social needs" (p. 82). Affective support networks provided members with a sense of belonging, mutual caring and the sharing of love (Israel, 1982). In the work setting, affective support networks were associated with emotional and moral support as well as encouragement.

Cognitive support. In accordance with Israel's (1982) definition of cognitive support networks, they provided membership with "access to diverse information, new knowledge, advice, and feedback" (p. 67). Her discussion of the various types of support networks suggested that cognitive aid was of less importance in health-related networks, than affective aid. However, in relationship to career networks the sharing of new and diverse information about particular employment fields was as essential as affective support. Welch (1981) began the first chapter in her book with "It's the process of developing and using your contacts for information, advice, and moral support as you pursue your career" (p. 27). As focus on this research, an assessment of various types of cognitive sharing was made.

Instrumental support. Often referred to as tangible support, "instrumental ties are those which are established for the purpose of providing tangible satisfaction of specific wants or needs" (Wilson, 1983, p. 82). Lin (1982) stated that instrumental actions and support were viewed as successful when social resources were provided through network contacts. Example of tangible support in the work setting were provision of financial aid and exchange of office services.

<div align="center">Career Networks</div>

In 1981 Mary-Scott Welch, recognized by women's researchers as an authority on the development and usage of career networks, published Networking: The Great New Way For Women to Get Ahead. In his 1980 review of Welch's work, McLure wrote:

> The author's chief audience is probably the woman who wants to improve her position in the organization or who desires a better job elsewhere. (p. 67) (Underlining added by researcher)

Welch (1981) developed a typology of career networks which categorized horizontal and vertical career positions into various types of network groupings. The typology consisted of two major groupings with various categories within each (see Table 2).

Table 2

Types of Network Relationships

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In-house Group (networks affiliated with a specific organization).

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1. In-house networks have a membership which is open to everyone in the organization. Meetings are scheduled regularly and topics of discussion focus on a variety of issues. The organizational structure of this type network may be formal or informal.

2. Same-company networks that organized around an issue focus on a specific need and may or may not continue to function after the resolution of the original issue.

3. Overground networks have an open relationship with management. They are supported by management and use company resources. Overground groups are represented in either of the aforementioned types of career networks.

4.   Underground networks have a poor or non-existent relation-
ship with management; they are usually viewed as trouble making
groups.  Membership and activities are usually kept secret and
segregated from the work environment.

Across Company Lines Group (membership composed of indi-
viduals from more than one organization).

1.   Vertical networks welcome participation from every working
individual in a specified geographic area.  Criterion for membership
is an interest in career advancement.

2.   Vertical-occupational networks have a·membership composed
of individuals from the same general field who work at various
hierarchial levels in organizations.

3.   Horizontal networks include individuals from diverse fields
who basically hold the same hierarchical positions in their respec-
tive organizations.

4.   Horizontal-occupational networks include individuals from
different organizations who are employed in the same field and hold
the same positions within their respective organizations.

5.   Individuals involved in multi-nets belong to more than one
type of network.  More time and energy is usually devoted to one
network affiliation while keeping abreast of activities in the
other(s).  Multi-net participation provides the opportunity to make
the largest number of career contacts.


## Women's Career Networks

"Men in upper-level positions--either economically, politically,
and so forth--form an exclusive national network of informal con-
nections, including attendance at select private schools, membership

in private clubs, vacations at specific resorts, and intermarriage" (Moore & Alba, 1981, p. 40). The most highly recognized and influential informal network is the "old boys' network."

In her 1980 article, Gillis defined the old boys' network as a subtle but significant vehicle that men have long been using to help build their careers" (p. 34). Welch (1981) described it as a process which:

> Men have always done without having to think about it—that is, develop use ... contacts. For inside information. For advice and ideas. For leads and referrals. For moral support when the going gets rough. Of [sic] someone to talk to in confidence, someone who understands what you're talking about without the need for a lot of background explanation. (pp. 15-16)

Identifying it as the best known hiring system, Socolow (1978) defined the old boys' network as a process "which selects and employs individuals through an informal and collegial exchange of names," (p. 42) rather than reliance on formal lines of communication and hiring practices. In Socolow's opinion, the old boys' network is "the single most pervasive obstacle to open access to positions in academe" (p. 43).

In assessing how the old boys' network operated, Welch (1981) wrote:

> When a job opens, a contract goes out for bids, a stock splits, a story breaks, a rumor spreads, a war threats—whatever—this "old boy" calls that "old boy" on the phone; or they meet for a drink or a game of golf, and before long some business gets done, to the satisfaction of both. Hundreds of other people may have been involved in the transaction, in one way or another personnel departments, stockholders, trade associations, public relations assistants, even bartenders - but it's the "old boys" who will have maneuvered it. (p.16)

The old boys' network simplified how men made contacts with each other. Welch (1981) continued, it "may not be the _fairest_ method of

operation ... but it is certainly effective ... Simply because men know each other (or knew of each other) well enough to get in touch informally," (p. 16) they were able to cut through much organizational red tape.

If systems and markets operated according to Lin's (1982) description as recorded below:

> In a perfect market system, where all job vacancies and their required skills were known to all who seek jobs and where recruitment of an applicant to fill the job depended entirely on the matching of the required skills and the skills possessed by each candidate (p. 131)

women would have no problems acquiring administrative roles—as they would be judged on their merits, credentials and qualifications. Since, as Lin concluded, systems were imperfect markets where the diffusion of information was not passed to everyone, women developed a response to the old boys' network—the "new girls' network" (Welch, 1981).

The new girls' network is necessary because

> Men are leaving the women they work with out of their informal channels. Men aren't telling women what they tell each other as a matter of course. Whether this is deliberate or not is a moot point ... whether it's malicious or careless, withholding information has the same effect - it puts women at a disadvantage, for information is power. (Welch, 1981, p. 32)

Through the new girls' networks, "Women are getting together to help each other get better jobs and/or to be more effective on the jobs they already have" (Welch, 1981, p. 16). Morrison (1981) explained that "Local women's networks help fill a void for these female managers who are lone pioneers amid a cadre of suspicious male colleagues" (p. 2).

Morrison (1981) described networks along three dimensions.

1.  It is a process of developing <u>informal interpersonal rela-</u><u>tionships</u>. "Networks do not show up on organizational charts because people in structured, direct reporting relationships are not considered part of [an individual's] network" (p. 1).

2.  It is a <u>functional process</u>-- networking serves a purpose. Members "get some kind of benefit or help from the relationship" (p. 1). She noted that this help is rarely "one-for-one, [but] rather a mutual respect for the other's ability to help when needed, as needed" (p. 1). Rawlins and Rawlins (1983) reached similar conclusions in their research.

3.  Network <u>relationships are not permanent</u>. They "come and go, and a network may change even though the [formal relationships] remain the same" (p. 1). Findings by Welch (1981) were congruent to Morrison's findings.

The literature on women's career networks indicated that they are positive tools in the development of career advancement strategies. Welch (1981) termed networking as the great new way for women to get ahead in the professional world--a process for making things happen. She summarized that one of the greatest benefits for women involved in networking was the psychological support they received. Networks provided a sense of community for women, as well as the opportunity for information retrieval, the possibility for job referrals and the opportunity for feedback.

Case studies cited by Welch (1981) indicated that career networking was advantageous when women: (a) knew what they wanted from the networking relationships, (b) knew what they were willing to give

to the networking process, and (c) understood which type of network best met their needs.

Fader (1984), job and career specialist, also viewed networks as a positive tool for gathering information about career positions. She wrote that the best positions never appeared in classified advertisements--they were advertised by word of mouth (p. 41). Morrison (1981) expressed similar feelings.

In 1982, Green concluded that "sharing of information and the creation of personal linkages" (p. 17) was the essence of career networks. Network participation allowed women to: (a) combat isolation, (b) gain access to needed information about the environment in which they worked or wished to work, and (c) create vital support systems which assisted with gathering information, seeking career advice, finding mentors or sponsors, or finding someone to provide moral support and encouragement.

Rawlins and Rawlins (1983) defined networking as "the systematic process of developing helpful contacts, linking people for assisting, supporting, and helping each other find needed resources, information, job leads, opportunities, and feedback. It reduces isolation and builds participation and self-confidence" (p. 117).

Several theorists researched networking in the academic setting. McGee (1979) studied personal and professional characteristics of women college presidents and assessed which factors sample members felt were significant in their career advancement. Networking was scored as either a significant or very significant factor by 75% of the participants. This statistic indicated that successful women

administrators viewed networking as an important tool to master and use in developing career advancement strategies.

McDonald (1979) reported that women in academic administration needed to establish and participate in networks as a means of increasing their visibility and promotion potential. This conclusion was based on her finding that women represented less than half of all college faculty and approximately 20% of all academic administrators. The exception applied to women's colleges where women held most key positions. She added, however, that women's colleges accounted for less than 5% of all academic institutions.

Stent (1978) conducted interviews with the founders of Concerns, a new girls' network composed of top-level administrators in the New England colleges. Sheila Tobias, Wesleyan Associate Provost and co-founder of Concerns, defined "networking [as] a response to the fact that top jobs are handled behind the scenes" (p. 18). She added that the need for such groups was not always necessary for women because they were not on track for top-level administrative posts. In addressing the purposes of Concerns, Tobias stated that meetings were "very supportive ... like a giant consciousness - raising group" (p. 19).

MacConkey (1980) suggested that women wanting to advance in higher education should develop intra-campus networks as well as inter-campus organizational networks. Intra-campus networks provided the opportunity for women: (a) to learn the uniquenesses of the decision-making process on their individual campuses, (b) to become familiar with the formal and informal communication systems which effect decision making on campus, (c) to identify the real seats of

power within the system, and (d) to become experts at developing communication linkages which helped them understand how the institution functions generally and specifically.

Networking was viewed as essential in retrieving information and providing emotional encouragement (Holt, 1981; MacConkey, 1980) in the academic environment. Holt wrote, "Loners typically do not advance in academe" (p. 22), and networking permitted women to learn who the movers and shakers were on campus. In other words, networking allowed women to tap into campus power sources.

Campbell (1983) combined the Collegial Model of Networking (a support network model for women) with the Dorothy A. Barrington Exercise and investigated the prejudices women in academe had toward each other. She hypothesized that hidden prejudices hindered women's professional advancement. Conclusions revealed that women did hold prejudices toward themselves and other women. Participants agreed that despite personal resentment and prejudicies, it was emotionally healthy for women to support each other and to assist each other in career advancement pursuits.

In her doctoral dissertation, Sawyer (1982) studied network characteristics which existed among deans and department heads in Colleges of Education in public four year institutions. She found no significant difference in the amount of network involvement of males and females in positions as deans or department heads. Sawyer concluded that hierarchial level significantly influenced the amount of network participation by the administrators.

Negative Aspects of Networking

Although literature reviewed indicated a general acceptance of

network participation as a viable tool for women's career advancement, Green (1982) and Morrison (1981) included comments in their research on the negative aspects of networking. In her article, "Networks: Beyond the Hoopla, " Morrison wrote "all the hoopla has made some people skeptical about networks ... others ... are actually offended by the very idea of networks, seeing them as a shortcut to competence" (p. 1). Green noted that some people become involved with developing contacts which have no substance or depth; thus, the network was of no value to its members. Others felt network relationships and activities were forced, manipulative and artificial.

Both Morrison and Green stated that networking was **not** the cure-all for women seeking to advance in management. Networking did not substitute for knowing one's job. "I must emphasize ... network support is based on performance. There is no substitute for being seen as good at your job, and there are two parts to that: doing good work and letting other people know it" (Welch, 1981, p. 108). Rawlins and Rawlins (1983) wrote that networking "begins with highly professional job performance" (p. 117).

Although Fischer (1982) did not study career networks per se, he found that network membership could be a burden at times. He summarized, "They [networks] can give pain as well as pleasure" (p. 135).

Men's Roles in Women Networks

How men fit into women's career networks was an important facet of the networking process. Two distinct points of view were found. Welch (1981) in her book, Networking: The Great New Way For Women To

<u>Get Ahead</u>, provided case study citations on both sides of this issue.
On the positive side, women emphatically stated that there was a
place for men in their networks. An interviewee stated, "It's
ridiculous to leave men out" (p. 215); while, Welch noted that "a
good networker uses every resource available to her, and that in-
cludes men" (p. 213). Another interviewee indicated that she was
employed in an area where the only persons to form relationships with
were men; therefore, networking with men was a necessity.

Other supporters of men taking part in women's networks noted
specific activities in which men could participate. They saw men in
the role of "invited guests or speakers rather than members"
(p. 214) of their groups. In this capacity

> men [could] talk about subjects which they and only they
> are experts, such as why men feel threatened by the rapid
> advancement of women into executive ranks, and what diffi-
> culties they have in accepting women. They're not being
> asked to tell women what women are doing wrong, as they so
> often like to do, but what perhaps they themselves are
> doing wrong <u>in re</u> women. In effect, this is sensitivity
> training for both sexes. (p. 214)

These women viewed men as possible helpers, supporters, and advisors.
For them men could conceivably shed some understanding on the con-
flicts women caused for men as a part of the hierarchical structure.

On the other hand, many other women networkers were "coming down
on the side of separatism" (Welch, 1981, p. 213). Their reasons
focused on the psychological impact men have on the interactions
between the women as noted in the quotations below.

> Until we <u>feel</u> equal and equally skillful, and until we
> are universally perceived as such and we don't have to be
> proving the point at every turn, we need a place and a
> mechanism to develop ourselves. (p. 213)

In an even stronger commentary an interviewee cited:

> Let's not kid ourselves ... we're going to be griping about
> men here, we're going to be developing strategies that will
> work with them. We're going to be trying to figure out how
> to out fox them. We can't possibly do that if they're
> here, listening and watching. Bring one man in and we'll
> all shut up--doesn't everybody see that? (p. 213)

Other positions were found which were more middle of the road than those described above. Stent (1978) supported the formation of new girls' networks as a means of meshing with old boys' networks for the purpose of better competing for upper level positions and gathering information.

Research conducted by Green in 1982 suggested that men and women in higher level positions should be a part of the same networks. She found that women and men at the upper echelons of the administrative hierarchy were more homogeneous than heterogeneous. Therefore, the basic networking techniques used by women in lower level positions when job hunting, becomes superflous for women at the upper administrative levels.

## Summary

The literature reviewed on women's issues and networking as a social process indicated that women are moving into the work force and that they recognize network participation as a viable force in their career advancement possibilities. Although a substantial amount of information was reviewed on both topics, no research investigated the application of social networking theory to the advancement of women through the administrative hierarchy in an academic environment. This research is directly concerned with investigating how women administrators in academe use personal and professional relationships, career networks, as a career advancement tool.

Chapter III specifies the methodologies and procedures used in conducting the research on how women in academic administration used career networks as a tool in their development and movements.

CHAPTER III

RESEARCH METHODOLOGY


Information included as a part of the methodological procedures used in this project include:

1.   identification of the research sample

2.   a discussion on mail questionnaires

3.   development of the questionnaire for this project

4.   pretesting the questionnaire

5.   procedures for analyzing collected data

6.   a description of the final research sample.

## Identification of Research Sample

The population of this study was defined as women academic administrators in the University of North Carolina system.  To identify these administrators, a sampling frame was requested from the University of North Carolina - General Administration's Office of Planning. Jaeger (1984) defined a sampling frame as a "list that uniquely identifies all the units in a finite population, in a particular order...[it] is equivalent to the operational population" (p. 28).  The list received included the names and position titles of all women classified as executive, administrative, or managerial personnel (see Appendix D) for the 1983-1984 academic year on each of the system's sixteen constituent campuses.  Two hundred twenty (220) women were included in the sampling frame.  Information is summarized in Table 3.

Table 3

Number of Women Holding Administrative Positions in the University
of North Carolina System During the 1983-84 Academic Year

| | |
|---|---|
| Appalachian State University | 5 |
| East Carolina University | 21 |
| Elizabeth City State University | 3 |
| Fayetteville State University | 4 |
| North Carolina A&T State University | 17 |
| North Carolina Central University | 8 |
| North Carolina School of Arts | 6 |
| North Carolina State University | 10 |
| Pembroke State University | 9 |
| University of North Carolina - Asheville | 7 |
| University of North Carolina - Chapel Hill | 59 |
| University of North Carolina - Charlotte | 16 |
| University of North Carolina - Greensboro | 32 |
| University of North Carolina - Wilmington | 5 |
| Western Carolina University | 4 |
| Winston Salem State University | 14 |

N = 220

Operational definitions of top-level administrative positions and middle-level administrative positions were developed (see Chapter I, Definition of Terms). In accordance with these definitions, certain individuals were deleted from the sampling frame. The resulting list was used as a basis for eliminating both underregistration and over-registration in the population on each campus. This was accomplished by mailing an information request (see Appendix A) to the Director of Institutional Research on each campus. Included in the forwarded information were the names of women serving as administrators for the 1983-84 academic year. Updated information, received from the Directors of Institutional Research, identified top-level and middle-level administrators for the 1984-85 academic year. Tables 4 and 5 summarize the numbers of women serving as top-level and middle-level administrators for the 1983-84 and 1984-85 academic years on each campus.

The aggregated listings received from Directors of Institutional Research indicated that 152 women held administrative positions for the 1984-85 academic year. Because of this limited number, it was decided that all identified persons would be included in the sample. Therefore, the sample and population in this study were congruent.

## Mail Questionnaires

The research literature indicated both advantages and disadvantages of mail questionnaires. It was generally viewed as one of the less expensive methods of conducting research. Mail questionnaires were also viewed as a rather quick method of gathering data because

Table 4

Number of Women Holding Administrative Positions During the 1983-84

Academic Year in Accordance with Operationalized Definitions

| Name Of Institutions | Top-Level Positions | Middle-Level Positions | Totals |
|---|---|---|---|
| Appalachian State University | 1 | 2 | 3 |
| East Carolina University | 3 | 4 | 7 |
| Elizabeth City State University | 1 | 1 | 2 |
| Fayetteville State University | 0 | 4 | 4 |
| North Carolina A&T State University | 2 | 5 | 7 |
| North Carolina Central University | 2 | 4 | 6 |
| North Carolina School of Arts | 1 | 4 | 5 |
| North Carolina State University | 1 | 3 | 4 |
| Pembroke State University | 0 | 4 | 4 |
| University of NC - Asheville | 0 | 5 | 5 |
| University of NC - Chapel Hill | 1 | 4 | 5 |
| University of NC - Charlotte | 2 | 9 | 11 |
| University of NC - Greensboro | 5 | 6 | 11 |
| University of NC - Wilmington | 0 | 1 | 1 |
| Western Carolina University | 1 | 3 | 4 |
| Winston Salem State University | 1 | 4 | 5 |
| | N=21 | N=63 | N=84 |

Table 5

Number of Women Holding Administrative Positions During the 1984-85

Academic Year in Accordance with Operationalized Definitons

| Name Of Institutions | Top-Level Positions | Middle-Level Positions | Totals |
|---|---|---|---|
| Appalachian State University | 1 | 2 | 3 |
| East Carolina University | 1 | 4 | 5 |
| Elizabeth City State University | 1 | 11 | 12 |
| Fayetteville State University | 1 | 5 | 6 |
| North Carolina A&T State University | 2 | 13 | 15 |
| North Carolina Central University | 2 | 11 | 13 |
| North Carolina School of Arts | 2 | 5 | 7 |
| North Carolina State University | 1 | 10 | 11 |
| Pembroke State University | 0 | 4 | 4 |
| University of NC - Asheville | 0 | 11 | 11 |
| University of NC - Chapel Hill | 2 | 9 | 11 |
| University of NC - Charlotte | 3 | 17 | 20 |
| University of NC - Greensboro | 5 | 7 | 12 |
| University of NC - Wilmington | 0 | 8 | 8 |
| Western Carolina University | 1 | 3 | 4 |
| Winston Salem State University | 1 | 9 | 10 |
| | N=23 | N=129 | N=152 |

the bulk of completed instruments were returned within two weeks (Mosher & Kalton, 1972).

A major concern associated with the mail questionnaire was the overall low response rate. Gay (1982) and Mosher and Kalton (1982) suggested several strategies for increasing response to mail questionnaires which included mailing instruments followed by reminder postcards. These researchers indicated that mailing two sets of questionnaires followed closely by reminder postcards could result in a return rate of at least 70%. The reminder postcard reinforced the fact that the questionnaire had been mailed and requested that the instrument be returned as soon as possible. Mosher and Kalton also suggested contacting non-respondents by telephone or conducting face-to-face interviews as a viable means of retrieving needed information.

To enhance return of mail instruments, Gay (1981) and Mosher and Kalton (1972) stated that not only should questions be clearly and simply written, the physical layout of the instrument should be attractive. A concise cover letter which "must try to overcome any prejudice the respondent may have against surveys" (p. 264) should be included with the instrument. The letter "explains what is being asked of the respondent and why, ... which hopefully motivates the responder to fulfill the request" (Gay, 1981, p. 162). Other factors which affected response rate were the assurance of anonymity and confidentiality of responses and the inclusion of stamped, self-addressed envelopes for returning completed forms.

## Development of the Questionnaire

Data were collected through the distribution of a mail

questionnaire developed by the researcher (see Appendix C). Two major types of questions were included--open-ended and closed-ended. Closed ended questions allowed the respondent "the choice of one or more of a number of fixed responses" (Jaeger, 1984, p. 9). Open-ended questions allowed the respondent "to construct, rather than select, a response" (Jaeger, 1984, p. 11). Open-ended questions provided the opportunity to gather more specific and detailed information.

Based upon the literature reviewed on social network theory and research and women's issues (see Chapter II), the questionnaire assessed specific types of information regarding how women used networking as a career development tool.

1. Question 1 was designed to ascertain how the administrators learned of their current position and if they used personal and professional relationships (networking).

2. If the administrator used personal and professional relationships in acquisition of her current position, questions 2-4 identified the members of her career network and the level of assistance she received from each network member.

3. Question 5 was underpinned in Israel's (1982) and Mitchell's (1969) identification of the characteristics of social networks. The question sought to identify network characteristics respondent attributed to each network member.

4. Question 6 was designed to assess the level of density within each respondent's network.

5. Based on the typology developed by Welch (1981), questions 7 and 8 were developed to assess the types of networks in which the respondents were involved.

6. Question 9 was developed to identify particular barriers which prohibited the administrators from engaging in career networks.

7. Questions 10-17 were designed to assess career movement of women in academic administration—with an emphasis on relocation for career development.

8. Questions 19-20 asked the administrators for their opinions regarding the importance of networking as a career advancement tool.

9. Demographic information was collected through questions 21-27.

A link number coding system was developed to ensure confidentiality of responses. Each questionnaire was coded. The master list of link numbers was not made assessible to anyone other than the researcher. Coded questionnaires were forwarded with personally addressed cover letters, which assured confidentiality, and a stamped, self-addressed return envelope (see Appendix B).

A master schedule for a main mailing and two follow-up mailings were developed. Approximately one week after each mailing a reminder postcard was forwarded to administrators (see Appendix B). Mailings were scheduled for two-week intervals. One week following the last mailing, a self-addressed non-response postcard was forwarded to non-respondents (see Appendix B). The purpose of the refusal card was an attempt to ascertain why individuals did not return the instrument.

## Pretesting the Questionnaire

Conducting pretests is standard practice in formal research. Mosher and Kalton (1972) described the pretest as a process which assisted with isolating problems with instrument design. Pretesting identified problems in sampling procedures, variability with the

population of the study, non-response rate, inadequacy of the instrument, inefficiency of directions, lack of clarity of wording, and phrasing of questions. Gay's (1981) discussion of pretests highlighted the same points.

Two pretests were conducted on the questionnaire used in this study. In the first pretest, six women were identified from the sampling frame received from the University of North Carolina General Administration. Each woman included in the pretest was classified as an assistant program director. This position title was not included in the population for the main study. Initial contact was made by telephone. The assistant directors agreed to take part in the pretest.

Questionnaires and cover letters (see Appendices B & C) were hand delivered by the researcher and collected on the following day. Comments resulted in refining and clarifying the wording of several questions. In addition, the pretests helped in combining three individual questions into one comprehensive question which helped to shorten the instrument.

Upon completion of revisions, a second pretest was conducted. Four assistant program directors were selected from the sampling frame. Initial contact was made by telephone. Three women agreed to participate. The fourth was not in her office on the day of the pretest, a substitution was made with a doctoral candidate. Questionnaires and cover letters were hand delivered and collected on the afternoon of the same day. Comments indicated that previous points of confusion had been corrected. One comment resulted in altering question four on the questionnaire to include a process for checking responses rather than writing out answers (see Appendix C).

Because of the length of the instrument, a major concern during pretesting was the length of time needed to complete the instrument. The cover letter addressed this concern directly.

## Data Analysis

### Rationale

Gay (1981) defined descriptive research as the collection of data, through the distribution of survey, personal interviews, and interviewer observation, to test hypotheses or to answer questions which were concerned with the current status of the way things are. In accordance with Gay's definition, this study was classified as descriptive research. As discussed previously, the sample and population in this study were congruent; therefore, it was also categorized as a census survey. Census surveys were conducted "when a population is relatively small and readily accessible ... [and] an attempt is made to acquire data from each and every member of a population" (Gay, 1981, p. 156).

### Use of descriptive statistics

As there was no need to generalize results to the population, data were analyzed using descriptive statistics. Collected data were reported in terms of the total sample and for women in top-level and middle-level administrative positions as two distinct groups. This procedure allowed the researcher to assess the extent to which sample participants used networking as a tool in career development. In addition, it provided the necessary information for comparing similarities and differences in the usage of networks as a career advancement tool by women in top-level and middle-level administrative positions.

Because the sample and population were congruent, tests of significance were not conducted; instead, measures of association were used to assess relationships between variables. Tests were selected for particular levels of measurement. Selected tests were classified as probability or proportional reduction of error statistics because "their values have a direct intuitive meaning and they can be compared to other statistics of this type" (Nie, et al, 1975, p. 230). The three statistics selected are discussed below.

1. Uncertainty coefficient

This statistic was used to assess levels of association when both variables were at the nominal level of measurement. The uncertainty coefficient measures the proportion by which "uncertainty" in the dependent variable was reduced by knowledge of the independent variable. It takes into consideration the data for the entire distribution of data rather than information concerning the mode as with the lambda statistic. The uncertainty coefficient only measures the strength and magnitude of the association between the variables.

2. Gamma

Gamma was selected to measure levels of association when both variables were at the ordinal level of measurement. It measures the probability of correctly guessing the order of a pair of cases on one variable once the ordering on the other variable is known. Gamma measures magnitude, strength, and the direction of variable association.

3. Eta

This statistic measures how dissimilar the means on the dependent

variable are within the categories of the independent variable. Eta
was used to measure the level of association when one variable was at
the ordinal level of measurement and the other was at the interval or
ratio level.

Variables were identified for respondents and network members as
two distinct groups. Each component part of question five was iden-
tified as an individual research variable and included in the network
member's group. All other questions were included as variables in the
respondent's group. Thirty-seven variables were identified for the
respondents and forty variables were identified for the network mem-
bers' group.

### The Final Sample

Mosher and Kalton (1972) wrote:

> As a rough guide, it seems that sometimes something like the
> same proportion of persons sent questionnaires respond to
> each mailing; if 60 percent reply to the first mailing, one
> might expect around 60 percent of the 40 percent of initial
> non-respondents (i.e. a further 24 percent of the initial
> mailing to reply to the first follow-up, and so on. (p. 266)

Following is an account of the response rate of return of ques-
tionnaire for this study using three mailings with follow-up post
cards forwarded after the first and second mailings. Each member of
the sample, 152 women administrators, was mailed a copy of the ques-
tionnaire—followed by a reminder card at the end of the first week.
After a two week period, 91 questionnaires (59.86%) were returned.

A second questionnaire was forwarded to 61 non-respondents.
It was followed by a reminder postcard at the end of the fourth week.
After the two-week period, an additional 30 questionnaires were re-
turned. This represented 49.18% of the remaining 61 surveys.

A third set of questionnaires was mailed at the end of the fifth week. At this point, 31 administrators had not responded. Nine surveys were returned. This statistic represented 29.03% of the remaining 31 questionnaires.

One hundred thirty (85.52%) administrators completed the questionnaires. Of the 130 responses returned, 11 were not usable for various reasons. In one instance, the administrator asked her subordinate to complete the instrument. Several administrators responded that the questionnaire did not apply to their individual situations; however, some wrote letters explaining how they ascertained their positions. One administrator returned the questionnaire with a note stating that she was extremely busy and did not have the time to complete the instrument. The 11 non-usable responses accounted for 7.69% of the returned response; thus the final sample included 119 administrators.

### Non-response Cards

Twenty-two self-addressed post cards were forwarded to administrators who did not respond to the three mailings of the questionnaire. These were sent with a cover letter explaining the purpose of the card; the card listed possible reasons for non-response (see Appendix B).

Fourteen (63.63%) refusal cards were not returned. The eight (36.36%) returned cards noted the following reasons for non-response:

1. Five (62.50%) administrators had planned to return the questionnaire but missed the deadline. Three of these women had jobs which contained a great deal of traveling, thus they did not receive their mail promptly.

2. Two (25.00%) administrators stated that the instrument was too long; one (12.50%) noted that the questions were too personal.

.3. One (12.50%) administrator noted that she had no interest in the study.

## Summary

Chapter III outlined the procedures and statistical methodologies employed in researching how women administrators used personal and professional relationships to advance in their careers. The text emphasized how the research questionnaire was developed and the usage of descriptive statistics to assess the relationship between position level and career advancement strategies and techniques. An account of how research respondents were identified, who participated, and reasons for non-participation were summarized in the chapter.

Chapter IV presents the analysis of demographic data on the research respondents.

CHAPTER IV

ANALYSIS OF DEMOGRAPHIC DATA

This chapter contains descriptive findings on the women who participated in the research. Vital statistics were collected on variables which were classified as personal and professional in nature. Personal variables identified were enthnicity, age range, and marital status. Professional variables identified were the types of positions held, educational level, faculty rank, years worked in higher education, years worked in current position, and salary range. Demographic information was based on data collected from frequency distributions and summarized in distribution tables.

## Personal Variables

Personal data assessed some of the qualities which described the 119 administrators as individuals. It was felt that the respondents' ethnicity, age range, and marital status could have some impact on their network participation and their career development strategies.

## Ethnicity

Women administrators in the University of North Carolina system represented two major groups—46.2% black women and 52.1% white women. In addition, 1.7% administrators were American Indians and two chose not to respond. Data summarized in Table 6 indicates that these statistics remained consistent when data were analyzed for top- and middle-level administrators. The approximate even split among the ethnic groups suggested that black and white women acquired

administrative positions within the University of North Carolina system in the same proportions.

The University of North Carolina system includes among its constituent campuses five institutions which are classified as traditionally black colleges. These campuses have a high percentage of black persons serving in all administrative positions. This fact coupled with the numbers of black women serving in administrative roles on traditionally white campuses serves to explain the high percentage of black women in the research population.

Table 6

Distribution of Ethnic Background

|  | Population | | Top-Level Administrators | | Middle-Level Administrators | |
|---|---|---|---|---|---|---|
|  | Frequencies | % | Frequencies | % | Frequencies | % |
| Ethnic Group |  |  |  |  |  |  |
| Black | 54 | 46.2 | 8 | 47.1 | 46 | 46.0 |
| White | 61 | 52.1 | 9 | 52.9 | 52 | 52.0 |
| American Indian | 2 | 1.7 | - | - | 2 | 2.0 |
|  | 117 | 100.0 | 17 | 100.0 | 100 | 100.0 |

Note. Two administrators did not indicate their ethnic background.

Age Range

Data were collected in intervals of five years ranging from 30 years to 59 years old. A "30 years old or less" and a "60 years old or more" category were provided also. One administrator chose not to respond. The mode for the population was the 29-35 years old age

interval and the mean age interval was the 40-44 years old age interval.

Top-level administrators' age statistics deviated from those of the population. Their mean age interval was 45-49 years of age and the mode was the 50-54 years old age interval. On the average, the 102 middle-level administrators were about 10 years younger than the top-level administrators. Their mean age interval was 40-44 years old and the mode was the 35-39 year age intervals. Complete data on the age variable is provided in Table 7.

Table 7

Distribution of Age Intervals

| | Population | | Top-Level Administrators | | Middle-Level Administrators | |
|---|---|---|---|---|---|---|
| | Frequencies | % | Frequencies | % | Frequencies | % |
| Age Intervals | | | | | | |
| 30 years old or less | 3 | 2.5 | - | - | 3 | 3.0 |
| 30-34 years | 12 | 10.2 | 2 | 11.8 | 10 | 9.9 |
| 35-39 years | 30 | 25.4 | 1 | 5.9 | 29 | 28.7 |
| 40-44 years | 21 | 17.8 | 4 | 23.5 | 17 | 16.8 |
| 45-49 years | 13 | 11.0 | 2 | 11.8 | 11 | 10.9 |
| 50-54 years | 17 | 14.4 | 5 | 29.4 | 12 | 11.9 |
| 55-59 years | 16 | 13.6 | 2 | 11.8 | 14 | 13.9 |
| 60 years or older | 6 | 5.1 | 1 | 5.9 | 5 | 5.0 |
| | 118 | 100.0 | 17 | 100.0 | 101 | 100.0 |

Note. One administrator did not indicate her age.

Marital Status

More than half (58.0%) of the respondents were married. The remaining 50 women indicated that they were not married; they were either: (a) never married (21.8%), (b) divorced or separated (60.0%), or (c) widowed (4.2%). Percentages of married top-level administrators were higher than those for middle-level administrators (see Table

8). These findings were consistent with Adams' (1972) career development model which highlighted women postponing marriage at the beginning of their careers while pursuing professional goals.

Table 8

Distribution of Marital Status

| | Population | | Top-Level Administrators | | Middle-Level Administrators | |
|---|---|---|---|---|---|---|
| | Frequencies | % | Frequencies | % | Frequencies | % |
| **Marital Status** | | | | | | |
| Never Married | 26 | 21.8 | 2 | 11.8 | 24 | 23.5 |
| Married | 69 | 58.0 | 12 | 70.6 | 57 | 55.9 |
| Divorced or Separated | 19 | 16.0 | 2 | 11.8 | 17 | 16.7 |
| Widowed | 5 | 4.2 | 1 | 5.9 | 4 | 3.9 |
| | 119 | 100.0 | 17 | 100.0 | 102 | 100.0 |

Data collected did not provide information on the length of time administrators were married or the age at which they married. This additional data would have helped in assessing if administrators in the system tended to postpone marriage in order to pursue professional goals. Conclusions reached are supported by literature findings on the marital status of women academic administrators of the 1980s. Benton (1980) and Piggott (1979) found that the women in their samples were more often married than single. Piggott's sample consisted of women administrators in North Carolina. Benton compared the marital status of administrators of the 1960s and 1970s to administrators of

the 1980s. She found that women administrators of earlier decades were more often single than married.

## Professional Variables

Variables selected assessed information that pertained directly to the administrators' positions and helped in classifying them as either top- or middle-level administrators. This information was necessary because it was the differentiation of the usage of career networks by each administrative level and the impact of these differences on career networks and advancement that was the essence of this study.

### Positions Held

Administrators indicated their exact position title. Responses revealed that the respondents held various titled positions in the administrative hierarchy. The respondents classified themselves in one of the following categories:

1. vice-chancellor
2. associate vice-chancellor
3. assistant vice-chancellor
4. dean--academic school
5. program director
6. program coordinator
7. registrar
8. librarian
9. bursar
10. dean--particular program.

These positions were grouped into top- or middle-level administrative posts as each level was operationally defined. Position titles containing vice-chancellor, associate vice-chancellor,

assistant vice-chancellor, and dean of an academic school were grouped as top-level positions. Position titles containing director, coordinator, registrar, librarian, bursar, and dean of a program were classified as middle-level administrative positions. Administrators who were deans of program were in Student Affairs administrative posts.

Most of the administrators were at the middle-level of the administrative hierarchy (see Table 9); 85.7% of the women held middle-level positions as compared to 14.2% in top-level administrative positions. The ratio of middle-level administrators to top-level administrators was 6:1. The high percentage of women serving in middle-level administrative posts is congruent with Moore's (1983) finding that most women in academic administration hold positions at the middle levels of the hierarchy.

Table 9

Distribution of Position Titles

| | Population | | Top-Level Administrators | | Middle-Level Administrators | |
|---|---|---|---|---|---|---|
| | Frequencies | % | Frequencies | % | Frequencies | % |
| Position Titles | | | | | | |
| Vice-Chancellor | 4 | 3.4 | 4 | 23.5 | - | - |
| Associate Vice-Chancellor | 3 | 2.5 | 3 | 17.6 | - | - |
| Assistant Vice-Chancellor | 4 | 3.4 | 4 | 23.5 | - | - |
| Dean - Academic School | 6 | 5.0 | 6 | 35.3 | - | - |
| Program Director | 77 | 64.7 | - | - | 77 | 75.5 |
| Program Coordinator | 11 | 9.2 | - | - | 11 | 10.8 |
| Registrar | 7 | 5.9 | - | - | 7 | 6.9 |
| Librarian | 3 | 2.5 | - | - | 3 | 2.9 |
| Bursar | 1 | 0.8 | - | - | 1 | 1.0 |
| Dean - Program | 3 | 2.5 | - | - | 3 | 2.9 |
| | 119 | 100.0 | 17 | 100.0 | 102 | 100.0 |

These data supported the common research finding that women in the 1980s were securing administrative positions. However, as noted by Gappa and Uehling (1979), Harragan (1977), Hennig and Jardim (1977), and Welch (1981) the acquisition of administrative positions for women tended to be at the middle-levels of the administrative

hierarchy. Movement into top-level posts took place at a much slower pace.

## Level of Education

Most administrators held a masters degree--4.5% noted study beyond the degree level. No doctoral level administrator indicated that she had engaged in study beyond the degree level. The researcher realized that this might have occurred because of the question's wording rather than the fact that respondents had not engaged in formal post doctoral study. Administrators were asked to list degrees held rather than the highest level of academic study.

Administrators holding bachelors degrees worked in areas other than Academic or Student Affairs. Their jobs required technical skills, e.g., computer background, accounting. These women were classified as middle-level administrators.

Data for top- and middle-level administrators indicated a relationship between level of education and level of position. Top-level administrators, for the most part, held doctorates. The high percentage of top-level administrators with doctoral degrees supported Ironside's (1982) conclusion that the doctorate was the key to entry into top-levels of academic administration.

For middle-level administrators, statistics on the level of education and level of position were more consistent with population frequencies than those of top-level administrators. Three middle-level administrators held professional degrees. They headed departments which required high levels of specialized knowledge, i.e., Director of Health Services.

In general, educational data were congruent with Piggott's (1979) conclusions that most women administrators in North Carolina held a masters degree. Data on educational level are summarized in Table 10.

Table 10

Distribution of Educational Level

|  | Population | | Top-Level Administrators | | Middle-Level Administrators | |
|---|---|---|---|---|---|---|
|  | Frequencies | % | Frequencies | % | Frequencies | % |
| Levels of Education |  |  |  |  |  |  |
| Bachelors | 16 | 14.5 | - | - | 16 | 17.0 |
| Bachelors Plus | 6 | 5.5 | - | - | 6 | 6.4 |
| Master | 43 | 39.1 | 4 | 25.0 | 39 | 41.5 |
| Master Plus | 5 | 4.5 | 1 | 6.3 | 4 | 4.3 |
| Doctorate | 37 | 33.6 | 11 | 68.8 | 26 | 27.7 |
| Professional | 3 | 2.7 | - | - | 3 | 3.2 |
|  | 110 | 100.0 | 16 | 100.0 | 94 | 100.0 |

Note. Nine administrators did not indicate their level of education.

Faculty Rank

In addition to holding administrative positions, 44.5% of the administrators had faculty ranking. Their posts ranked from full professorships (30.4%) to adjunct personnel (16.1%). Faculty ranking was bi-modal--with eight administrators noting that they were assistant or associate professors.

The large majority (82.3%) of the top-level administrators had faculty ranking as compared to 39.2% middle-level administrators having faculty ranking. The difference of 43 percentage points

suggested that top-level administrators filled the dual role of faculty member and administrator as a part of their position responsibilities more than the middle-level administrators. Data on faculty rank are summarized in Table 11.

Table 11

Distribution of Faculty Rank

| | Population | | Top-Level Administrators | | Middle-Level Administrators | |
|---|---|---|---|---|---|---|
| | Frequencies | % | Frequencies | % | Frequencies | % |
| **Faculty Rank** | | | | | | |
| Full Professor | 17 | 30.4 | 9 | 64.3 | 8 | 19.0 |
| Associate Professor | 8 | 14.3 | 2 | 14.3 | 6 | 14.3 |
| Assistant Professor | 8 | 14.3 | 1 | 7.1 | 7 | 16.7 |
| Instructor | 4 | 7.1 | 1 | 7.1 | 3 | 7.1 |
| Lecturer | 5 | 8.9 | - | - | 5 | 11.9 |
| Adjunct Professor | 9 | 16.1 | 1 | 7.1 | 8 | 19.0 |
| Other | 5 | 8.9 | - | - | 5 | 11.9 |
| | 56 | 100.0 | 14 | 100.0 | 42 | 100.0 |

Note. Sixty-three administrators did not have or did not indicate their faculty rank.

Tenure in Higher Education

Tenure in academic administration was assessed by investigating (a) the number of years the administrator worked in higher education and (b) the number of years the administrator held her current position.

The number of years the administrators worked in higher educa-
tion. Responses to this question suggested that women administrators
in the University of North Carolina system had a strong sense of
commitment and loyalty to higher education as a career field. One
hundred seven (89.9%) administrators stated that they worked in higher
education for six years or more. On the average, the women (26.1%)
held their positions from 11-15 years.

The largest number of top-level administrators (35.3%) had worked
in higher education between 16 and 20 years. However, the mean inter-
val of years top-level administrators worked in higher education was
11-15 years. Most middle-level administrators (89.2%) were employed
in higher education for six years or more. The largest percentage of
the group (26.5%) worked in the field for 21 years or more. The mean
interval of years they were employed was 11-15 years.

These statistics (see Table 12) supported Piggott's (1979) con-
clusions that women in academic administration remained in the field
of higher education; thus, they exhibited a sense of commitment to
higher education as a career field. In Piggott's study, the majority
of the sample had worked in higher education for five years or more.

Table 12

Distribution of the Number of Years Administrators Were Employed In
Higher Education

| | Population | | Top-Level Administrators | | Middle-Level Administrators | |
|---|---|---|---|---|---|---|
| | Frequencies | % | Frequencies | % | Frequencies | % |
| Number Of Years | | | | | | |
| Less than one year | 1 | 0.8 | - | - | 1 | 1.0 |
| 1 - 5 years | 11 | 9.2 | 1 | 5.9 | 10 | 9.8 |
| 6 - 10 years | 25 | 21.0 | 2 | 11.8 | 23 | 22.5 |
| 11 - 15 years | 31 | 26.1 | 5 | 29.4 | 26 | 25.5 |
| 16 - 20 years | 21. | 17.6 | 6 | 35.3 | 15 | 14.7 |
| 21 years or more | 30 | 25.2 | 3 | 17.6 | 27 | 26.5 |
| | 119 | 100.0 | 17 | 100.0 | 102 | 100.0 |

While the findings supported Piggott's conclusions, they were in
contrast to the assumptions made by many employers that women were
not committed to their careers because of responsibilities to home and
family (Benton, 1980; Collins, 1971; Oppenhiemer, 1975; Pulley, 1979;
Swoboda & Vanderbasch, 1983). This suggested that ambivalence, which
was discussed by Bradwich and Douvan (1977), Epstein (1970), Horner
(1965), and Rossi (1971), may not have been much of a concern for the
respondents as it was for administrators of earlier decades. The
respondents may have bridged some of their conflicting feelings re-
garding home and career responsibilities.

The number of years the administrator held her current position.
Based on five-year intervals, 75.2% administrators stated that they

had held their posts from 1 to 10 years. The mean interval of years positions were held was 6-10 years. While 7.7% administrators held their posts for one year or less, only 2.7% held their current positions for 21 years or more.

Upper-level administrators had a shorter tenure in their current positions. Three women (17.6%) held their posts for one year or less with the majority (58.9%) having held their posts for 1 to 5 years. Only one upper level administrator noted that she had held her post for more than 10 years. She headed an area traditionally affiliated with women's studies. The mean interval of years for which top-level administrators held their positions was 1-5 years. The 100 middle-level academic administrators indicated longer tenures in their positions than top-level administrators. On the average they held their jobs for 6-10 years. Data are summarized in Table 13.

Table 13

Distribution of the Number of Years Administrators Held Their Current
Positions

| | Population | | Top-Level Administrators | | Middle-Level Administrators | |
|---|---|---|---|---|---|---|
| | Frequencies | % | Frequencies | % | Frequencies | % |
| Number Of Years | | | | | | |
| Less than one year | 9 | 7.7 | 3 | 17.6 | 6 | 6.0 |
| 1 - 5 years | 64 | 54.7 | 10 | 58.9 | 54 | 54.0 |
| 6 - 10 years | 24 | 20.5 | 3 | 17.7 | 21 | 21.0 |
| 11 - 15 years | 12 | 10.3 | - | - | 12 | 12.0 |
| 16 - 20 years | 5 | 4.4 | 1 | 5.9 | 4 | 4.0 |
| 21 or more years | 3 | 2.7 | - | - | 3 | 3.0 |
| | 117 | 100.0 | 17 | 100.0 | 100 | 100.0 |

Note. Two administrators did not indicate how long they had held their current positions.

Again the data supported research findings of Fulton (1983), Gappa and Uehling (1979), and Hennig and Jardim (1977) that women did secure middle-level hierarchial positions more readily than top-level administrative posts and had held middle-level positions for longer periods of time. Taken in conjunction with the impact of affirmative action policies on higher educational institutions, (Safran, 1984; Travis, 1976), these data suggested that the passage of federal legislation for equal opportunity in the work setting made the acquisition of middle-level posts available for women. Women in lower-level administrative posts were promoted to middle-level administrative positions and women entering academic administration acquired

middle-level administrative positions at the onset. This factor helped to explain the high percentage (19%) of middle-level administrators holding their current positions for 10 years or more. It also helped to highlight that women were not readily advancing through the hierarchy once they acquired middle-level posts.

## Salary Level

Data collected revealed that the mean salary for the population ranged from $25,000 to $29,000 per annum. This figure represented the salary range of 25.3% of the administrators. The 17 upper-level administrators quoted annual remunerations at three levels with a mean salary range of $40,000-$44,999 per year. Middle-level administrators were paid a mean annual salary of $25,000-$29,999 per year. The majority (76.5%) earned between $20,000 and $39,999 per annum. Data on salary range are summarized in Table 14.

Table 14

Distribution of Annual Salary Range

| | Population | | Top-Level Administrators | | Middle-Level Administrators | |
|---|---|---|---|---|---|---|
| | Frequencies | % | Frequencies | % | Frequencies | % |
| Salary Intervals | | | | | | |
| Less than $15,000 | - | - | - | - | - | - |
| $15 - 19,999 | 9 | 7.6 | - | - | 9 | 8.8 |
| $20 - 24,999 | 18 | 15.1 | 1 | 5.9 | 17 | 16.7 |
| $25 - 29,999 | 30 | 25.2 | - | - | 30 | 29.4 |
| $30 - 34,999 | 24 | 20.2 | 3 | 17.6 | 21 | 20.6 |
| $35 - 39,999 | 10 | 8.4 | - | - | 10 | 9.8 |
| $40 - 44,999 | 9 | 7.6 | - | - | 9 | 8.8 |
| $45,000 or more | 19 | 16.0 | 13 | 76.5 | 6 | 5.9 |
| | 119 | 100.0 | 17 | 100.0 | 102 | 100.0 |

These findings indicated that women in administrative posts in the University of North Carolina had higher salary levels than the average salary levels for other women in academic administration in North Carolina. In 1979, Piggott noted women in her sample had an annual salary of approximately $17,900 per year. Comparisons made with information summarized in the January 18, 1984 edition of The Chronicle of Higher Education indicated that women academicians in the University of North Carolina system had higher salaries than the average female administrator in North Carolina. The average salary for women administrators in this study was $20,924; on the average women administrators in the University system earned $5,000 to $10,000 more per year.

This suggested that for women administrators in the University of North Carolina system some of the discriminatory remuneration barriers noted by Crosby (1984), Harragan (1977), Safran (1984), and Zeitz (1983) may in fact be disappearing or at least decreasing. A comparison of male and female administrators' salary levels within the University of North Carolina system would have provided extremely useful information in assessing salary levels and rates of salary increases for women; however, this information was not available based on data collected.

## Summary

Vital statistics provided a composite description of the women administrators in the University of North Carolina system. Some differences were identified when assessing these data for administrators at the top- and middle-levels of hierarchy. As a group, the demographics were as follows:

1. the numbers of black and white women administrators were approximately equal.

2. their average age interval was 40-44 years of age.

3. they were more often married than single--this finding especially applied to top-level administrators.

4. they had completed master's level study and held middle-level administrative positions of program director in most cases.

5. approximately one of every two had faculty rank.

6. they had worked in higher education from 11 to 15 years on the average but had held their current posts for approximately five years. Taken together, these findings suggested that women had been able to secure administrative positions

in the system, but the acquisition of and promotion to the highest level posts was a slow process.

7. their average annual salary ranged from $25,000-$29,999 per year.

CHAPTER V

ANALYSIS OF CAREER NETWORK DATA

The phrase "personal and professional relationships" as used in this study was synonymous with networking. Welch (1981) described networking as the development of personal and professional relationships and contacts which individuals use to assist with career advancement and movement. It was assumed that administrators who noted the usage of personal and professional relationships as a method of securing their current positions were involved in the networking process.

The primary purpose of this project was to assess if women in academic administration used networking as a career strategy tool and to assess how they used it. Data collected were analyzed using descriptive statistics which included measures of central tendency and measures of variability. Data were compared to ascertain if women in top-level and middle-level administrative positions applied network characteristics to their career development plans.

## Method of Job Acquisition

The research questionnaire was designed to assess several possible methods of job acquisition. An "other" category, with space for an explanation, was also provided. Categorical choices included: (a) personal and professional relationships, (b) professional organizations, (c) local North Carolina newspaper advertisements, (d) nationally recognized newspapers, (e) advertisement in The Chronicle of

Higher Education, (f) other professional literature or announcements, and (g) distribution of resume. All administrators responded to the inquiry. Frequency distributions of responses, as summarized in Table 15, indicated that the most popular method of securing administrative positions was the reliance on personal and professional relationships. Although the administrators checked more than one method in several instances, no method was rated nearly as high as personal and professional relationships.

Table 15

Distribution of Methods of Job Acquisition

| | Population | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|---|
| Methods of Job Acquisition | | | |
| Personal and Professional Relationships | 75.6% | 88.2% | 74.3% |
| Professional Organizations | 7.6% | 23.5% | 4.9% |
| Local NC Newspaper | 1.7% | - | 2.0% |
| Nationally Recognized Newspaper | - | - | - |
| The Chronicle of Higher Education | 14.3% | 23.5% | 12.7% |
| Other Professional Literature | 13.4% | 29.4% | 10.8% |
| Distribution of Resume | 6.7% | 5.9% | 6.9% |
| Other | 25.2% | 29.4% | 24.5% |

Note. Percentages total more than 100% because each administrator was permitted to select all methods of job acquisition she used.

Various comments cited in the "other" classification indicated that many administrators were promoted to their current posts. Promotions were based on "performance in past position," "merit," or "movement through the ranks in [a] department". Several administrators were approached by superiors and asked to consider taking the position. They had no knowledge of the position's vacancy

prior to the approach. This suggested that these administrators were sought out for their current positions because of their positive reputation in other posts. An administrator wrote:

> My previously established reputation—actually [...]
> sought me out ... I never have until this day
> applied for a job, I've always been offered one!

Comments such as these supported statements made by Barrax (1984) regarding how women acquired their positions. Barrax indicated that the members of her sample felt their performance in lower level posts resulted in their being sought out for higher level positions.

Some administrators noted that excellent interviews and support from search committees were important factors in the acquisition of their current posts. Fulton (1983) and Barrax (1984) found that the women in their studies believed search committees to be a supportive entity in acquiring administrative positions.

Several top-level administrators did not respond to the questionnaire; they felt the survey instrument was not applicable to their situations. Instead, these administrators wrote letters explaining how they acquired their posts. Their comments focused on being sought out or highly recommended by professional colleagues. Letters contained quotes such as:

> nominated by several colleagues—not requested

> when you find yourself landing in an administrative
> position that you had not applied for and that you
> had not known you were being considered for, one or
> more of your associates have had a role to play in
> bringing that [the administrator's acquisition of a
> position] about

and

> I had been very active in many volunteer activities
> with leadership roles, and because I feel of my

reputation in that arena [sic], I was asked to
assume my present position.

Written comments of this nature also reflected a reliance on
personal and professional relationships but of a different type than
those of middle-level administrators. One top-level administrator
wrote:

a network that works that way [as described above]
may be more amorphous and less structured ... but it
may be stronger.

Notations on questionnaires completed by top-level administrators also
indicated a sense of amorphousness although network members were
identified. This suggested that networks of middle-level administra-
tors were probably more structured and identifiable than those of upper
level administrators.

## Barriers to Networking

One concern of this research was to ascertain what, if any,
barriers women encountered in their attempt to engage in career net-
works. Eighty-eight administrators used networking for job acquisi-
tion. A large percentage (35.3%) did not respond to the inquiry.
They made no indication regarding barriers. The researcher had no way
of deciding if the missing response meant administrators had not
encountered barriers or if they were unwilling to state barriers
encountered. An additional (32.9%) administrators noted that they had
not encountered any barriers. Three respondents (3.4%) noted "not
applicable" to the inquiry. The researcher assumed that these three
women had not encountered any barriers in their attempt to engage in
the networking process. A total of 32 (36.3%) women were recorded as
not encountering barriers to network involvement.

Three women wrote explanatory statements with their "none" responses. One indicated that she was very fortunate because she was sought out for inclusion in activities. The second commented that she was "either lucky or good at what I do or both" as a possible reason for her inclusion. The third administrator noted that she aggressively sought leadership roles in organizations and activities in order to gain recognition among her colleagues. Thus, she gained entrance into otherwise unavailable situations.

As noted in research conducted by Tibbetts (1979b) and Zeitz (1983), women often viewed themselves and feminine characteristics negatively. Aggressive, assertive, and independent behaviors were viewed as masculine traits and women who exhibited these characteristics were judged as social deviants. In contrast, the aforementioned comments suggested that the administrators in the present study saw themselves as having strong track records as competent leaders who exhibited aggressiveness and independence. The display of positive attitudes toward themselves as leaders resulted in others judging them positively in their administrative capacities. This seemed to account for their inclusion in activities rather than exclusion.

Two women stated that they did not participate in networking. One wrote:

> Networking [is] not a part of my activities consequently no difficulties—nor do I perceive any disadvantages because of [my] lack of participation.

The second wrote:

> I do participate in the network process.

She gave no further explanation. As noted by Green (1982) and Morrison (1981), some administrators viewed networking negatively. They viewed

it as a manipulative and artificial process which by-passed competence and professionalism. The two respondents in this study intimated that networking was not a positive asset to their career development.

Hennig and Jardim (1977), Moore and Alba (1981), and Welch (1981) described the old boys' network as the opportunity for men to meet each other and make contacts which provided them with a favorable environment for sharing career advancement information and prospects. Nine administrators noted their barriers to network inclusion was the inability to "break into" the old boys' network. Comments such as:

> not being able to join the Rotary Club or play golf
> or participate in locker room activities or join in
> after work drinks

suggested that women administrators felt exclusion from the old boys' network resulted in their missing necessary business transactions and information which were shared in these informal settings. One administrator wrote:

> As a female in a male-dominated office, I find I am
> excluded from various activities like office
> lunches with other program directors (didn't think
> you'd want to hear 'man talk') to projects
> requiring organization (man's work).

Welch (1981) noted that women's inability to retrieve information put them at a disadvantage—for the more information to which one had access, the more powerful that individual. She viewed power and information as synonymous and tapping into informal communication channels was necessary to acquire them both. Exclusion from the old boys' network prohibited women administrators from having access to information shared through informal communication channels.

Several administrators noted other comments which focused on men as the primary barrier to their network participation. One woman

stated that men were supportive of her on a "one-on-one basis" but were not supportive in groups when other men were present. Another shared that she now holds the position held by her current supervisor. She wrote:

> My superior (the ...) had been in my position prior to my arrival and had established his own 'informal' professional network through which decisions were made without my input.

Other women indicated that men really "don't want women in the 'inner' network of top administrators" for a variety of reasons: (a) some men "fear that women want to take over," (b) many men were unable to accept "a woman as a leader," and (c) some men felt that women were deterrents to their personal upward mobility goals.

These findings were also noted in social stratification literature (Collins, 1971; Epstein, 1970; Janeway, 1971; Oppenhiemer, 1975; Richmond-Abbott, 1983) which emphasized that both genders had expected roles to fulfill and deviation from societal expectations was not viewed positively. In addition, these comments supported Welch's (1981) finding that the introduction of women into the upper levels of the administrative hierarchy produced conflict and stress in the work environment. Statements made indicated that the research respondents perceived males in their work setting as feeling threatened because women were actively seeking the power and prestige associated with top-level hierarchical positions. These conclusions were congruent with those reached by Green (1982) regarding conflict created in organizations as women sought administrative positions.

Many respondents cited other women as the primary source of their network exclusion. An administrator cited that not only did she feel excluded by men from active participation in networks but found that

women also excluded her. Someone else wrote "women are less inclined to support members of their own sex" which implied that men tended to provide more support for each other than women. Several comments pertained to the "Queen Bee" syndrome. Women noted that they felt little or no support from women in higher level positions. Another respondent wrote that she felt resentment from her female colleagues which stemmed from professional jealousy.

Campbell (1982), Horner (1965;1968), Kushner (1979), and Tibbetts (1979b) found that women did discriminate against each other. Statements made regarding the "Queen Bee" syndrome were congruent with conclusions reached by Berry and Kushner (1979) that women administrators labelled as "Queen Bees" were not supportive of other women because they believed that everyone should "make it" on their own. Comments further supported Warihay's (1980) conclusions that women in top-level positions _perceived_ themselves as being very supportive of their juniors. However, the lower-level administrators did not perceive the upper-level administrators as supportive in their attempt to advance in their careers.

Despite negative comments regarding women helping women, several respondents indicated a positive attitude toward their involvement with other women in developing career networks. They noted a great interest women's networks but found:

little networking among women,

difficulty in starting 'good old gal' networks

or that established women's networks were weak and ineffective. Still, these administrators expressed a sincere desire to meet with

other women.  They sought professional relationships with women who were:

>       competent  administrators  on  their  hierarchical
>       level

that were also interested in networking.

Several administrators noted a strong desire for network participation but indicated other barriers.  Two women felt that the rural location of their institutions was a barrier.  One administrator noted exclusion which she termed "the old timers network."  She felt that as a new administrator she was not included in activities or information sharing to which <u>established men and women</u> on her campus had access.  Another comment included some mention of race as a barrier to network inclusion.  This respondent described several other barriers in more detail than the mention of her racial background. Because of the lack of emphasis on the racial comment, it was assumed that the racial concern was secondary to the other concerns.

Personal lifestyle and personality were also recorded as barriers to network participation.  An administrator cited that <u>her</u> shyness prohibited her from seeking relationships which could lead to the development of successful networking.  Another wrote:

>       I am uncomfortable with social 'chit-chat' and I
>       find myself thinking about how much time I'm
>       wasting and how much work I have.

Sarah Weddington, aide to former President Carter, addressed such issues in her 1983 presentation of the annual conference of the National Association of Women, Deans, Administrators, and Counselors. Weddington stated that the development of successful networking among women depended on their developing aggressive attitudes toward inclusion in certain activities and understanding the importance of leaving

the office in order to acquire important information that was rarely shared in memorandums or through formal chains of communication. These comments related to conclusions reached by Harragan (1977) and Hennig and Jardim (1977) that women often did not understand the structure of organizations and how communication and information move through it.

"Singlehood" was also cited as a barrier to network involvement. Several administrators indicated that being unmarried caused them to be excluded from many of the social activities where important contracts could be made. Single women with small children noted that their situations did not allow sufficient time "to cultivate" strong network relationships. These findings were similar to conclusions related by Erazti (1983) in her study of women academic administrators. She noted that the mother and wife roles did have an impact on women's career advancement.

Some married administrators also indicated that the lack of time due to home responsibilities served as a barrier to network participation. Life cycle research revealed that women were often torn between responsibilities to homes and careers (Epstein, 1970; Oppenheimer, 1975). Very few respondents noted difficulties with life cycle issues. However, as noted by Rossi (1971) in her conclusions on ambivalence, negative feelings regarding responsibilities to home and career situations were often repressed. Participants could have experienced more feelings of ambivalence but chose to repress rather than address the issue.

While many women did not note barriers to network inclusion, many others cited a number of barriers. Exclusion from network participation focused on the old boys' network, non-support from other women,

lack of organized women's networks, and life-cycle issues. In accordance with research conducted by Jones (1982) women faced two major forces which prohibited them from advancing administratively. She classified the forces as internal and external barriers. The barriers to network participation listed by the administrators in this study were easily classified within Jones' perceptions of external and internal forces. Jones' classification of external issues, those affiliated with "society's attitudes, systems and structures" (p. 26), were applied to respondent's comments which pertained to the old boys' network, social and sex stratification, and sex discrimination. Issues which centered on the respondent's marital status, mother and/or wife role versus time for network participation, and individual personality styles were classified as internal barriers to network involvement.

## Major Types of Networks In Which
## Administrators Held Membership

The respondents provided two types of information as a means of assessing the kinds of networks in which top- and middle-level administrators generally held membership: (a) the types of organizations in which their network members were employed (b) the hierarchical level at which their network members worked. A prototype of networks to which women in academic administration held membership was developed by combining these data.

### The Types of Organizations in Which Network Members Were Employed

Seventy-two of the 88 administrators who used personal and professional relationships for job acquisition identified the types of organizations in which their network members were employed. Frequency of responses are summarized in Table 16. The data indicated a strong

tendency for academic administrators to develop networks within the
institution where they worked--intra-campus networks.

Table 16

Types of Organizations in Which Administrators Were Employed

| | Population | | Top-Level Administrators | | Middle-Level Administrators | |
|---|---|---|---|---|---|---|
| | Frequencies | % | Frequencies | % | Frequencies | % |
| Type Of Organization In Network Members Worked | | | | | | |
| Some Academic Institution | 26 | 36.1 | 5 | 38.5 | 21 | 35.6 |
| Various Academic Institutions | 21 | 29.2 | 5 | 38.5 | 16 | 27.1 |
| Academic and Non-Academic Institution | 19 | 26.4 | 3 | 23.1 | 16 | 27.1 |
| Other | 6 | 8.3 | – | – | 6 | 10.2 |
| | 72 | 100.0 | 13 | 100.0 | 59 | 100.0 |

Note. Sixteen administrators did not identify the type of organization
in which their network members worked.

The development of intra-campus networks is feasible when assessed in
conjunction with Moore's (1983) conclusion that institutions of higher
learning tended to promote personnel rather than hire from the
outside.  Thus, the cultivation of intra-campus network relationships
which resulted in the recognition of an administrator's potential and

expertise was considered as a very positive step in career planning and advancement.

Information provided in Table 16 also indicated that a fairly large percentage of the administrators, especially top-level administrators, were involved in networks which contained membership from various academic institutions. Inter-campus networks provided the opportunity for administrators to keep abreast of a wide range of issues and career opportunities within higher education in general. MacConkey (1980) noted that women wanting to advance in academic administration needed to develop inter- and intra-campus networks as a means of gathering pertinent information and learning the politics of higher education.

The data indicated that 77.0% top- and 62.7% middle-level administrators engaged in networks with other academicians. These high percentages suggested that women in academic administration were serious about their careers in the field of higher education and devoted a great deal of their time and energy to developing relationships which assisted them with understanding the politics of the field.

The Hierarchical Level of Which Network Members Worked

Frequency data was provided by 78 of the 88 research respondents. The administrators indicated the hierarchical levels at which their network members were employed. Results of the inquiry are summarized in Table 17.

Table 17

Hierarchical Levels at Which Network Members Worked .

|  | Population | | Top-Level Administrators | | Middle-Level Administrators | |
|---|---|---|---|---|---|---|
|  | Frequencies | % | Frequencies | % | Frequencies | % |
| Hierarchical Level At Which Network Members Worked |  |  |  |  |  |  |
| Same Level As Respondent | 13 | 16.7 | 13 | 100.0 | 13 | 20.0 |
| Various Administrative Levels | 59 | 75.6 | - | - | 46 | 70.8 |
| Professional and Non-Professional | 5 | 6.4 | - | - | 5 | 7.7 |
| Other | 1 | 1.3 | - | - | 1 | 1.5 |
|  | 78 | 100.0 | 13 | 100.0 | 65 | 100.0 |

Note. Ten administrators did not identify the hierarchical level at which their network members worked.

The finding that top-level administrators maintained networking relationships with other top-level administrators exclusively was important. Lin (1982) concluded that administrators choose to develop relationships with others who were in higher administrative posts than themselves. This permitted the administrator access to influential and pertinent information and resources. Since top-level administrators were already at the top, they could only gather useful information from others at their level or those in more influential positions at the upper echelons of the organization.

Middle-level administrators, on the other hand, denoted that 70.8% of their network members worked at various hierarchical levels in the organization and some were non-professionals. This finding

suggested that the junior administrators sought diversity in network relationships as a means of gathering pertinent information. They attempted to develop networking relationships with top-level administrators and conceivably developed relationships with persons in the offices of the top-level administrators as a means of gathering some information to which the top-level administrator had access.

To summarize the types of networks to which women in academic administration in the University of North Carolina system belong, the typology developed by Welch (1981) was used (see Table 2). Top- and middle-level administrators were involved in different kinds of networks. Middle-level administrators were most often involved in intra-campus networks with membership from varying hierarchical levels. Such networks were classified as in-house vertical occupational career networks. Top-level administrators were only affiliated with other top-level administrators who were usually academicians working in various institutions. This type of network was classified as across company lines horizontal occupational career networks.

The networks of the top-level administrators were more specialized in that membership was open to those at a particular hierarchical level within the career field of higher education. Middle-level administrators had more diverse networks. Membership was most often, but not exclusively, open to those in higher education at various hierarchical levels within one institutional setting.

Characteristics of Career Networks

Data were collected on the three types of network characteristics identified by Israel (1982) and Mitchell (1969) (see Table 1). Selected morphological characteristics on which data were collected were

anchorage and density. Three interactional characteristics were analyzed--content, homogeneity, and directedness. The third set of data were collected on three functional characteristics of career networks--affective, cognitive, and tangible support systems for ego. Discussions that follow serve to describe the attributes of career networks for the population and both administrative levels.

## Morphological Characteristics

Morphological network characteristics describe the physical structure of a network. Selected morphological characteristics, anchorage and density, pinpointed the starting point of the career network study, the size of the career network, and the nature of the relationships between network members and the respondent.

Anchorage. The study of anchorage identified the reference or starting point of the network investigation. Career networks focused on a single entity, ego, and the structural relationships ego had with network members. Five components of career network study were examined (a) identification of ego, (b) ethnic and gender composition of ego's network, (c) size of the networks, (d) type of assistance provided by network members, and (e) level of intensity of network relationships after the administrator acquired her current position.

1. Identification of ego

The reference or starting point of career network study was women administrators in the University of North Carolina system. These women were classified as either top- or middle-level administrators in accordance with operationalized definitions (see Chapter I - Definition of Terms). Career network attributes were studied from the administrators' perspectives and perceptions. One hundred nineteen

administrators were included in the study. Seventeen women were classified as top-level administrators and 102 women were classified as middle-level administrators.

2.   Network size

Kadushin (1982) noted that a network could contain from one to an infinite number of network members. Eighty-eight (73.94%) of the 119 administrators indicated that they used personal and professional relationships for acquisition of their current positions. They identified from one to nine individuals in their career networks. For top- and middle-level administrators, the mode was four and three network members, respectively. The administrators' networks tended to range from small to medium level in size: 11 of the 15 (73.33%) top-level administrators and 61 of the 73 (83.36%) middle-level administrators identified four or less people in their networks.

The average number of network members for the population was 3.3. Top-level administrators had an average of 3.7 network members and middle-level administrators had an average of 3.2 network members. Thus top- and middle-level administrators had career network of approximately the same size.

3.   Ethnic and gender composition of network members

General frequency statistics comparing the ethnicity and gender of network membership revealed that most administrators had network members who were white males.

Table 18

Average of the Average Number of Network Members in Individual Admin-
istrator's Networks by Ethnicity and Gender

|  | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|
| Ethnicity and Gender | | |
| Ethnicity | | |
| Blacks | 1.0 | 0.8 |
| Whites | 2.2 | 2.3 |
| Gender | | |
| Males | 2.4 | 2.3 |
| Females | 1.6 | 0.9 |

Note. Statistics based on the responses of 14 top-level and 72
middle-level administrators.

Statistics derived from assessing the ethnic and gender composi-
tion of the networks of the individual administrators indicated that
69.0% of the administrators had no blacks as network members while
17.4% administrators cited that they had no white network members.
Zero represented the modal statistic for numbers of black network
members and two network members was the mode for white network members.
On the average, the administrators had 2.3 white persons in their
networks in comparison to .86 black persons. These data indicated that
network members were generally white. The ratio of white to black
network members was almost 3:1.

An assessment of the network members by gender revealed that 10.5%
respondents had no men in their networks whereas 40.7% respondents had
no women in their networks. On the average, the administrators had 2.3
male and 1.0 female network members. The mode for males was 2 and 0

for females. Data supported the assumption that academic administrators had more males than females in their career networks.

Table 19

Average Proportion of Network Members by Ethnicity and Gender

|  | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|
| Ethnicity | | |
| Blacks | 31.1% | 23.5% |
| Whites | 66.7% | 72.5% |
| Gender | | |
| Male | 63.8% | 70.2% |
| Female | 36.2% | 28.9% |

Note. Statistics on ethnicity do not total 100% because data on the Asian and American Indian Populations were disregarded due to small representations in each classifications.

Data in Table 19 emphasized that the largest proportion of network members were white and male and that the networks of top- and middle-level administrators, as groups, had different ethnic and gender compositions. Most notable was the finding that top-level administrators had a lower proportion of whites and males in their networks than the junior administrators.

These findings suggested that top-level administrators had career networks which were more diverse in ethnic and gender composition than the networks of middle-level administrators. Upper-level administrators formed alliances with any persons who were classified as upper-level administrators. They also formed more relationships with other women who were at the upper echelons of the administrative structure. This suggested that women in top-level administrative positions actively sought to provide each other with information and emotional support

through the networking process. This finding was important because it negated the research conclusions of Horner (1965; 1968), Mitchell (1973), and Tibbetts (1979b) that women were not supportive of each other and that top-level administrators used all contacts available to them. Middle-level administrators, on the other hand, relied more on white males for network support.

The combination of research conclusions reached by Cummings (1979) and Fulton (1983) helped to explain the high numbers of white men identified as network members. Cummings found that 96% of the chief executives and 80% of all other academic administrative positions were held by men. Fulton (1983) concluded that 79% of the academic administrators were white men, 14% were white women, 5% were minority men, and 2% were minority women. Her findings were based on an investigation of 52 administrative positions at 1,037 institutions. The conclusions of these researchers indicated that most top-level academic administrators were male and white.

Combining research findings of Cummings (1979) and Fulton (1983) with Lin's (1982) assessment of the distribution of resources in the organization provided more support for the high number of white men as network members. Lin reported that most resources were distributed to hierarchical positions at the upper levels of the pyramidal structure. She noted that the more contact an administrator had with individuals having access to the greatest resources, the better the administrator's chances for obtaining privileged resources for achieving her personal and professional goals.

When all of these conclusions were combined, and one understood that most academic administrators were white men (Cummings, 1979;

Fulton, 1982) and those at the highest level of the hierarchy had access to most influential information and resources (Lin, 1982), then it was logical that the astute women wishing to advance in adminis-tration would select to develop professional relationships with white men. Because men possessed most information, the possibility and probability of gaining access to crucial information and resources increased when white men were included in women's career networks.

In summary, the ethnic and gender composition of career networks of women at both hierarchical levels was most often composed of white males. However, the top-level administrators cited that a larger proportion of their networks were composed of women and blacks. This emphasized that the ethnic and gender composition of top-level administrative networks was more diverse than those of middle-level administrators who tended to rely on the white male for support through the networking process.

4. Levels of assistance

Barnes (1969) summarized that the primary order network was comprised of those persons who were directly tied to ego—forming a ring around her. Within the ring, various levels of closeness were identified as ego defined meaningful relationships between herself and her network members. In the study of career networks, the interaction measured was the type of assistance network members provided for the administrators. Three levels of assistance were identified: (a) extremely helpful, (b) helpful, and (c) somewhat helpful. The more assistance the member provided for the administrators, the closer he or she was to ego within the primary order.

Administrators were asked to define the three levels of assistance provided by their network members. A cursory examination of responses indicated that administrators readily defined extremely helpful and helpful; however, many women did not define the somewhat helpful level of assistance. Respondents easily distinguished between the first two levels of assistance, but the distinction between somewhat helpful and helpful was not easily made. This inability or unwillingness to delineate between somewhat helpful and helpful suggested that both classifications might not have been necessary.

How the administrators defined the levels of assistance also revealed a general pattern. Many women listed four to six characteristics to describe extremely helpful network members. They then selected two or three of these characteristics to define helpful members and one of the helpful characteristics to define somewhat helpful network members.

The administrators had a general conceptualization of how they viewed their network members and relationships. When asked to define various levels of network assistance, they prioritized their general conceptualizations so that those issues which were considered most important became their definitions of extremely helpful members; while the concepts of the lower end of their prioritized lists became their definitions of somewhat helpful network members.

Detailed scrutiny of completed definitions revealed that the levels of assistance very often contained the same types of characteristics; however, descriptive words and phrases were used to distinguish levels of helpfulness. At the extremely helpful level, descriptive words exemplified an abundance of the characteristics while

descriptive words for the somewhat helpful level of assistance were of a more general nature.

Following is a listing of the composite definitional characteristics for each level of assistance. Included with the characteristics are some examples of the terms and phrases used by the respondents when defining the levels of assistance.

Extremely helpful. Descriptive words used to describe extremely helpful network members were "unusually strong", "strongly urged", "assistance beyond the call of duty", "detailed", "strongly urged", "actively", "goes out of one's way", and "extremely". Definitional characteristics of extremely helpful network members provided the administrators with the following types of assistance.

1. They provided emotional support, moral support, and encouragement.

2. Network members wrote detailed letters of reference and recommendations which revealed personal knowledge of the respondents abilities and capabilities.

3. These network members made important personal contacts with potential employers. Contacts were both formal and informal, i.e., making formal introductions, setting up meetings, making telephone contacts.

4. They made pertinent information and material available which was "accurate, current and appropriate [and] which may not be common knowledge."

5. Various strategies for success were provided. Network members discussed "pitfalls associated with the position," "interview

strategies," history of the position and its operation, and "gave advice."

6.    Several network members provided financial assistance, e.g., "funding for study" and "funding for relocation."

7.    Administrators noted that their network members intervened at the search committee level.  Activities included providing information on the "status of the search," "speaking up on their behalf during the Committee interview," and making "strong written recommendation to the Committee."

8.    Network members sometimes created positions for respondents and ensured funding of the position.

Helpful.  Descriptive words used at this level were "suggested," "provided," "helped," "supported," and "assisted."  Helpful network members were defined as individuals who provided the following kinds of assistance:

1.    They provided encouragement and suggestions but "did not go out of [their] way" to be of assistance.

2.    These members "offered the names of contact persons" but did not make actual contacts.

3.    They shared "common knowledge information."

4.    Members made information on various success strategies available but did not engage in long term discussions.

Somewhat helpful.  Descriptive words used at this level were "general," "casual," and "informed."  Somewhat helpful network members were defined as individuals who:

1.    provided general support and encouragement but "remained in the background."  They were available if approached.

2.  made general comments about the position's availability.

3.  wrote basic letters of reference and recommendations.

In terms of Israel's (1982) typology of functional aspects of networks (see Table 1), the definitional characteristics pointed out specific purposes members served for respondents. Extremely helpful network members provided affective, cognitive and tangible support for the administrators. Helpful network members provided cognitive support and affective support. Somewhat helpful network members provided limited cognitive support.

Frequency data as summarized in Figures 2, 3, and 4 indicate that administrators classified most network members as extremely helpful resources. This finding held true for the population and respondents at both administrative levels. On the average, the individual administrators rated most of their members in the moderate to high range of extremely helpful. When extremely helpful was ranked one and somewhat helpful was ranked three, the mean level of assistance offered by network members was 1.5 and the mode was 1.0. These data indicated that administrators identified and selected individuals for participation in their networks who they believed to be very important and helpful as career development resources.

Calculations of the average numbers of network members administrators identified as providing extremely helpful, helpful, or somewhat helpful assistance and the average proportion of the levels of assistance network members provided for respondents at both administrative levels are summarized in Table 20 and 21.

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Table 20

Average of the Average Numbers of Network Members Providing Each Level
of Assistance for Individual Administrators

|                      | Top-Level Administrators | Middle-Level Administrators |
|----------------------|--------------------------|-----------------------------|
| **Levels of Assistance** |                      |                             |
| Extremely Helpful    | 2.3                      | 1.6                         |
| Helpful              | 1.3                      | 1.0                         |
| Somewhat Helpful     | 0.2                      | 0.5                         |

Note. Data based on responses of 14 top-level and 67 middle-level
administrators.

Table 21

Average Proportion of Each Level of Assistance Provided in Networks

|                      | Top-Level Administrators | Middle-Level Administrators |
|----------------------|--------------------------|-----------------------------|
| **Levels of Assistance** |                      |                             |
| Extremely Helpful    | 69.0%                    | 52.9%                       |
| Helpful              | 26.9%                    | 34.7%                       |
| Somewhat Helpful     | 4.0%                     | 11.5%                       |

Note. N=14 for top-level administrators; N=67 for middle-level
administrators; 3 top-level administrators and 34 middle-level
administrators did not respond, thus proportions do not equal 100%.

Somewhat Helpful
34 (12.4%)

Helpful
92 (33.6%)

Extremely Helpful
148 (54.0%)

EGO
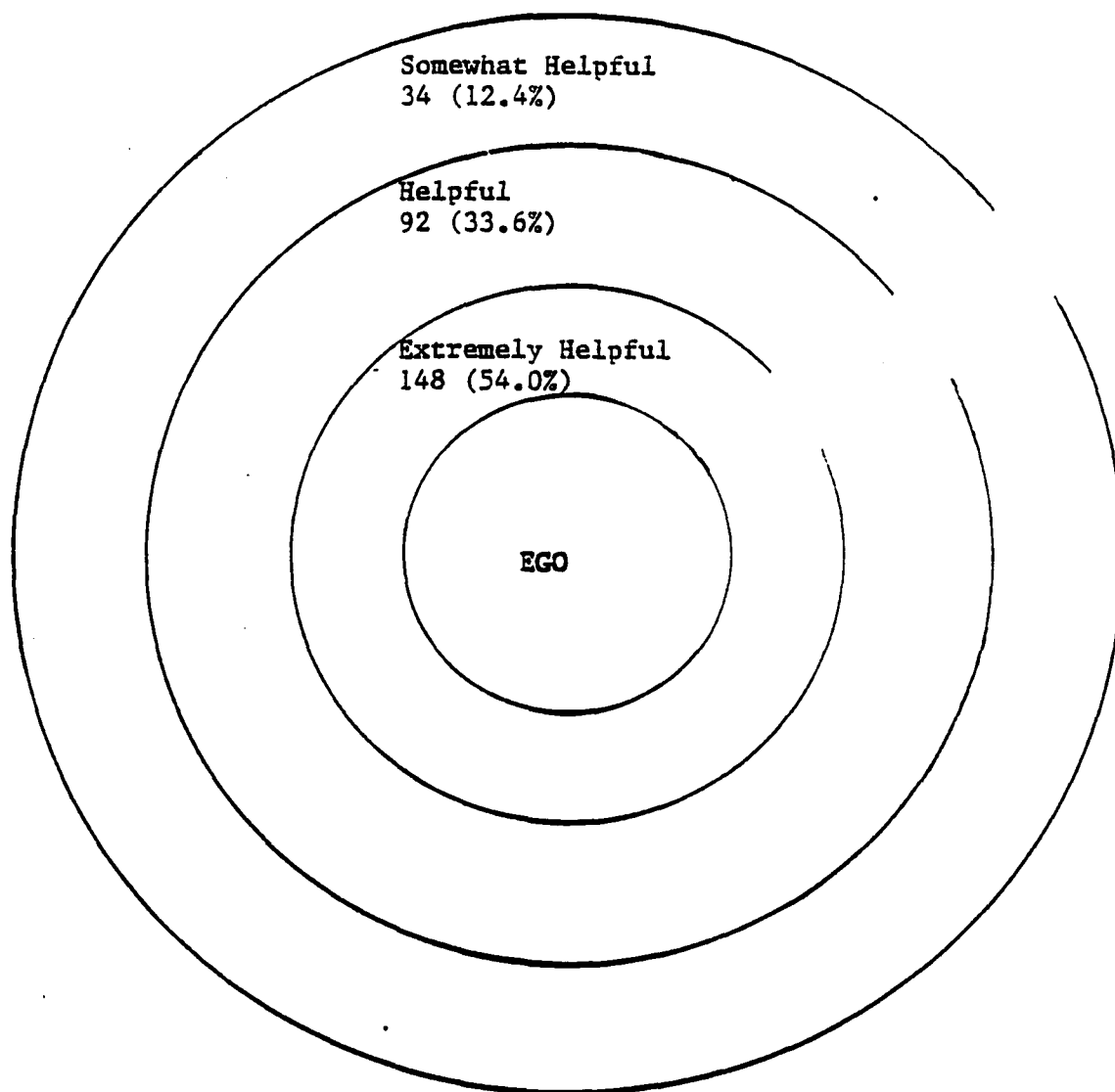
Figure 2. Administrators' Classification of Network Members By
Level of Assistance

Note. N=289. Fifteen network members were not classified in accor-
dance with the level of assistance provided.
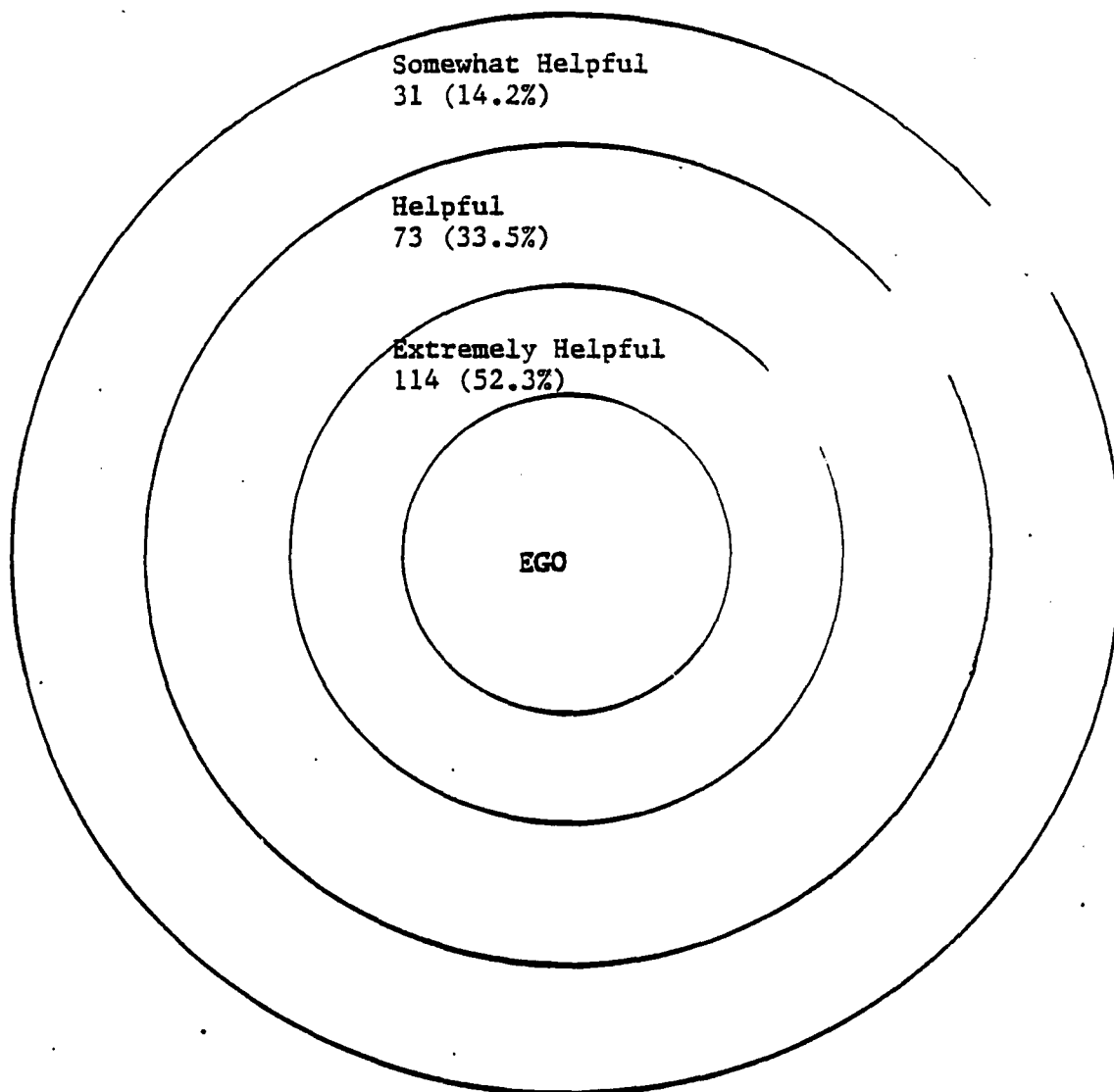
Figure 3. Top-Level Administrators' Classification of Network Members by Level of Assistance

Note. N=57. One network member was not defined in accordance with the level of assistance provided.
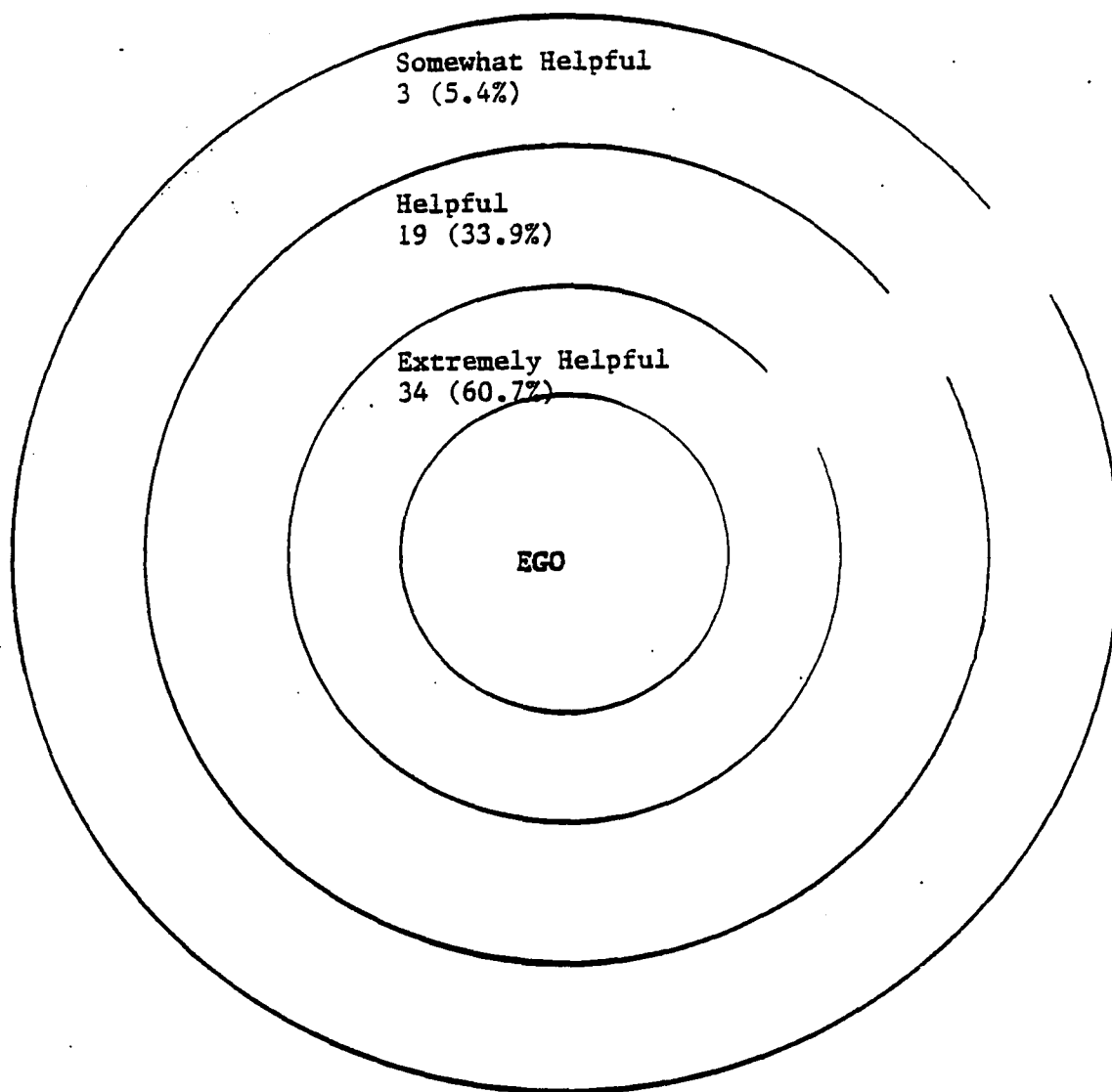
**Figure 4.** Middle-Level Administrators Classification of Network Members by Level of Assistance

Note. N=232. Fourteen network members were not classified in accordance with the level of assistance provided.

A comparison of these data for both administrative levels indicated that top- and middle-level administrators classified the largest proportion of their network members as extremely helpful and that most administrators considered their individual network members as extremely helpful resources. This held true for top-level administrators more than for the middle-level administrators.

These findings suggested that top-level administrators formed direct alliances with others having access to the most useful information available; while, middle-level administrators had direct contact with network members who were not as capable of providing the most pertinent resources for career advancement regarding potential career aspirations. These persons may have occupied a higher administrative position than the middle-level respondent but the information available was only useful in career planning. Thus, for middle-level administrators, network relationships focused on the sharing of information which was useful but limited. This implied that middle-level administrators needed to make additional contacts to acquire the most useful information.

In summary, there was a tendency for the population to cultivate network relationships with individuals they considered extremely important resources in career planning strategies. Extremely important network members provided emotional support, information, and financial assistance in many instances. Top-level administrators identified the largest proportion of their network members as extremely helpful. This suggested that their network ties were stronger than those of middle-level administrators. Middle-level administrators, on the other hand, identified a larger proportion of their network members at the

helpful and somewhat helpful level which suggested that these relationships were developed primarily for the purpose of gathering various types of information which led them to more important information and contacts.

5. Nature of network relationships after job acquisition. As noted by Morrison (1983) and Welch (1981), network relationships change over time. Their findings indicated the women's network affiliations change as their needs, goals, and objectives change. Findings in this study were consistent with those of Morrison and Welch. In comparing the nature of network relationships during job acquisition (see Chapter V--Anchorage, part 4) with relationships after job acquisition, it was found that network relationships changed after job acquisition. The assessment of change focused on the network relationships at four levels: (a) the same as it was during job acquisition, (b) greater than it was, (c) less than it was, and (d) no contact. The administrators noted that in instances where there was no contact with network members after acquiring their positions, the member either expired, retired, or was not geographically close to the administrator.

Evaluations of the average number of network members with whom administrators maintained each level of contact after jobs were acquired indicated that top- and middle-level administrators' relationships changed in differing directions (see Table 22).

Table 22

Average of the Average Number of Network Relationships Between Admin-
istrators and Network Members at Each Level of Contact After Job
Acquisition

| | Population | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|---|
| **Level of Contact** | | | |
| Same As It Was During Job Acquisition | 1.0 | 0.9 | 1.1 |
| Greater Than It Was During Job Acquisition | 0.9 | 1.0 | 0.9 |
| Less Than It Was During Job Acquisition | 0.9 | 1.5 | 0.8 |
| No Contact | 0.3 | 0.3 | 0.3 |

Note. Data based on responses of 87 administrators.


Top-level administrators' network relationships tended to decrease in intensity after job acquisition while middle-level administrators' relationships tended to remain consistent. This difference was important. It indicated that top-level administrators primarily used their network relationships prior to job acquisition. After accepting their posts, the need for network affiliations to provide certain types of information or encouragement declined.

Middle-level administrators indicated that their relationships with network members remained consistent. These women apparently engaged in networks as a means of gathering certain types of information or moral support. The level of support was not only necessary when pursuing positions but was needed as the middle-level administrator assumed responsibilities of the position. This suggested that

middle-level administrators engaged in networks which provide them with direct support over longer periods of time.

Administrators at both levels indicated that the second level of contact of network relationships after securing their positions was an increase in relationship intensity. This suggested that as some women secured new positions which required them to meet responsibilities with which they were unfamiliar, they may have relied on the assistance of a network member to help with making necessary adjustments. These network ties focused on the need of the administrators to learn the particular strategies for success in new roles.

## Density

Density study measured the proportion of network members who knew each other. It was assessed by Kapferer's (1969) formula (see Chapter II--Career Network Characteristics) and measured between the levels of 0 and 100. The higher the density level, the higher the proportion of people in the network were affiliated with each other. Density in career networks was evaluated at two levels--the proportion of network members who knew each other well (density-friends) and the proportion of network members who were acquaintances (density-acquaintances). Seventy-five of the 88 administrators who participated in networking responded to the density inquiry.

Final conclusions were based on comparisons of frequency data and average proportions of density in networks of women at both administrative levels. These findings were combined in order to describe the internal structure of network relationships of women at each administrative level.

Density-friends. Population statistics indicated that administrators tended to have high levels of density-friends within their networks; 62.7% administrators had density-friends levels in the medium to high range--33.34 or higher. The mode was 100; 23 (30.7%) administrators noted that all of their network members knew each other well. The mean level of density-friends was 58.12; the standard deviation was 33.66.

The 13 responding top-level administrators had very high levels of density-friends among network members. Responses were bi-modal. Four administrators had networks with a density-friends level of 100 and four had density-friends levels of 50. Approximately 70% of the top-level administrators noted density-friends levels at 50 or more (see Figure 5). The group mean was 56.79 and the standard deviation was 36.67. These statistics indicated that for the majority of top-level administrators at least half of their network members knew each other well. This finding signified a sense of closeness among the network members of top-level administrators and suggested that they formed cliques for the purpose of assisting each other with career pursuits at top levels of administration.

Middle-level administrators noted a wider range of density-friends levels within their networks. Of the 62 respondents, 38.7% had low density-friends levels---33.33 or less, 11.3% had density-friends levels in the mid range--34.34 to 66.66, and 49.9% had high density-friends levels at 66.67 or higher (see Figure 6). The mode was 100; 30.6% women indicated that all network members knew each other well. The average density-friends level was 58.40 with a standard deviation of 33.30.
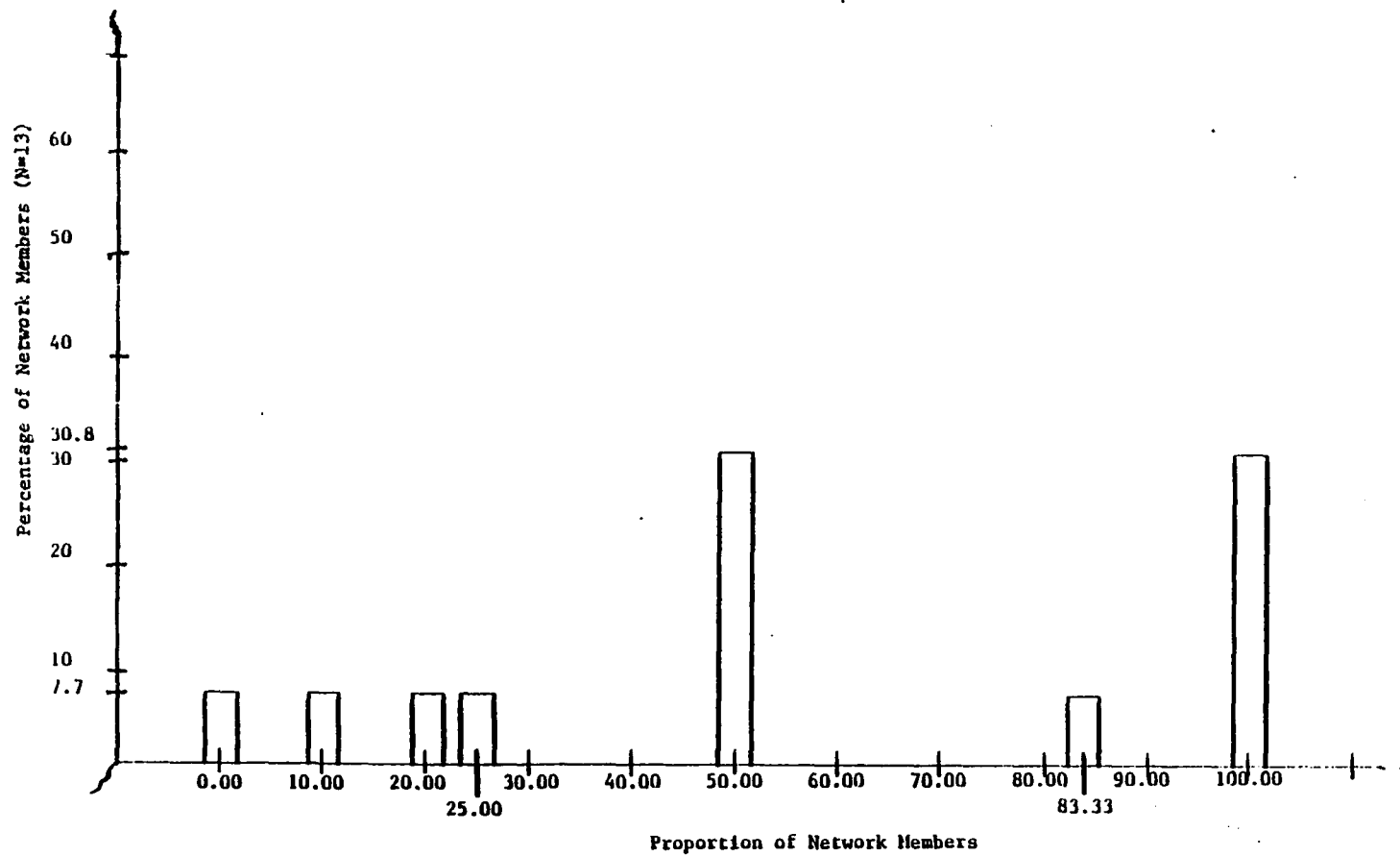
Figure 5. Proportion of Network Density-Friends for Top-Level Administrators.

Unlike top-level administrators, density-friends levels for middle-level administrators were not as concentrated at the upper end of the measurement scale but more scattered throughout the measurement range. This scatter of density-friends levels suggested that career networks of middle-level administrators were not as close-knit internally as career networks of top-level administrators.

Top- and middle-level administrators indicated that they had approximately the same proportion of density-friends among their network members, 20.2% and 20.6%, respectively. However, the internal structure of density-friends relationships differed within the administrative levels (see Figure 5 and 6). Density-friends levels for top-level administrators were concentrated at the high end of the scale while middle-level administrators indicated more diversity in the numbers of people in their network who knew each other well.

This suggested that top-level administrators' network members were cohesive groups of individuals having access to important information which was shared freely within the network. This level of sharing permitted top-level administrators access to the wealth of resources which were usually available to individuals in hierarchical positions at the upper echelons of the organizational structure. The above assumption raised a question regarding the level of homogeneity among network members of top-level administrators: if the network members knew each other well and formed strongly knitted career network groups, were they also similar in regards to attributes other than membership in the network?

The finding further suggested that middle-level administrators depended more on their acquaintance relationships for acquiring

Proportion of Network Members
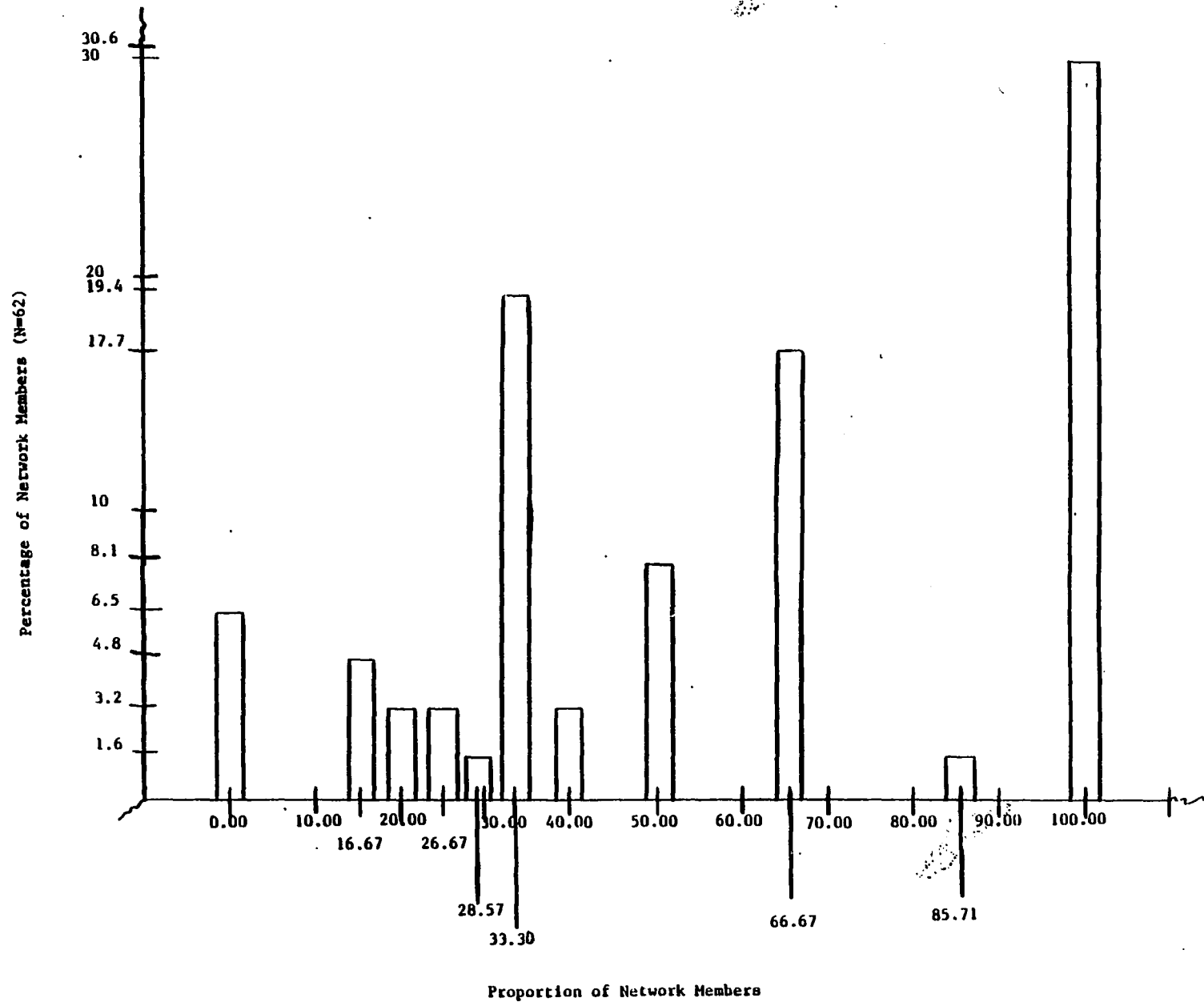
Figure 6. Proportion of Network Density-friends for Middle-Level Administrators

information than upper-level administrators. In accordance with Granovetter's (1973; 1982) findings, acquaintance or weak network ties allowed the administrator to gather more diverse types of information. If this assumption is supported by acquaintance data, it would indicate that middle-level administrators tap into information resources other than those in their primary order relationships.

Density-acquaintances. Population statistics for density-acquaintances were almost directly opposite of those of density-friends. Most administrators, 53.3%, noted that their networks did not contain any individuals who were acquaintances. Density-acquaintances levels measuring 33.33 or lower represented 80.0% of the responses. The mean density-acquaintances level was 20.43 with a standard deviation of 28.09.

The data indicated that most (61.5%) top-level administrators, had networks were none of the members were acquaintances (see Figure 7). No top-level administrator indicated that more than half of her network members were acquaintances. The highest density-acquaintances level for top-level administrators was 50, the mean level of density-acquaintances was 15.85, and the standard deviation was 22.24.

The measure of density-acquaintances for the junior level administrators showed that 51.6% women had networks where no members were acquaintances. Three (4.8%) administrators indicated density-acquaintances levels of 100. The mean density-acquaintances level was 21.39 and the standard deviation was 29.22. The internal structure on density-acquaintances is depicted in Figure 8.

These data indicated that middle-level administrators had more network members who were weakly tied to each other than top-level
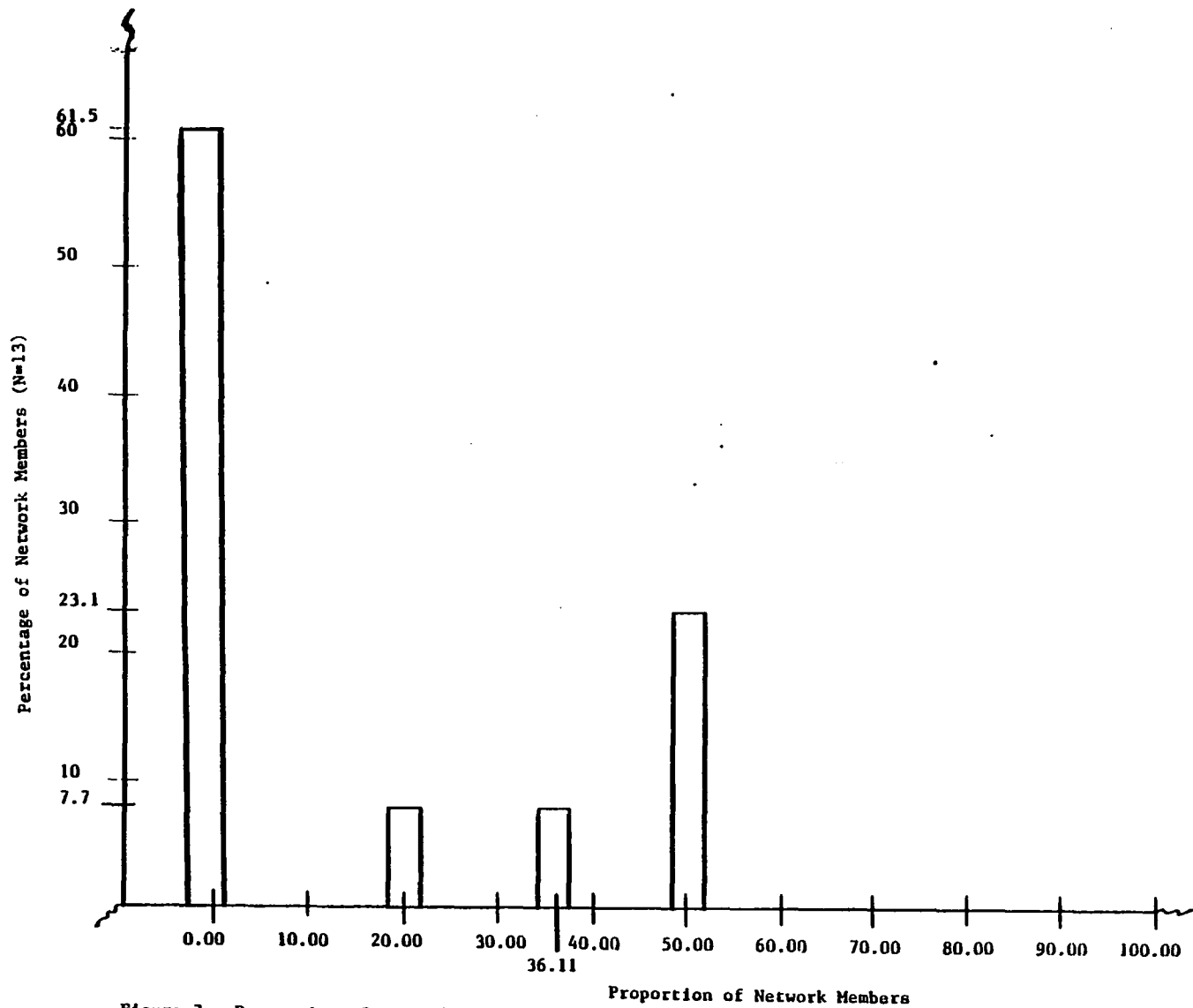
Figure 7. Proportion of Network Density-friends for Top-level Administrators.
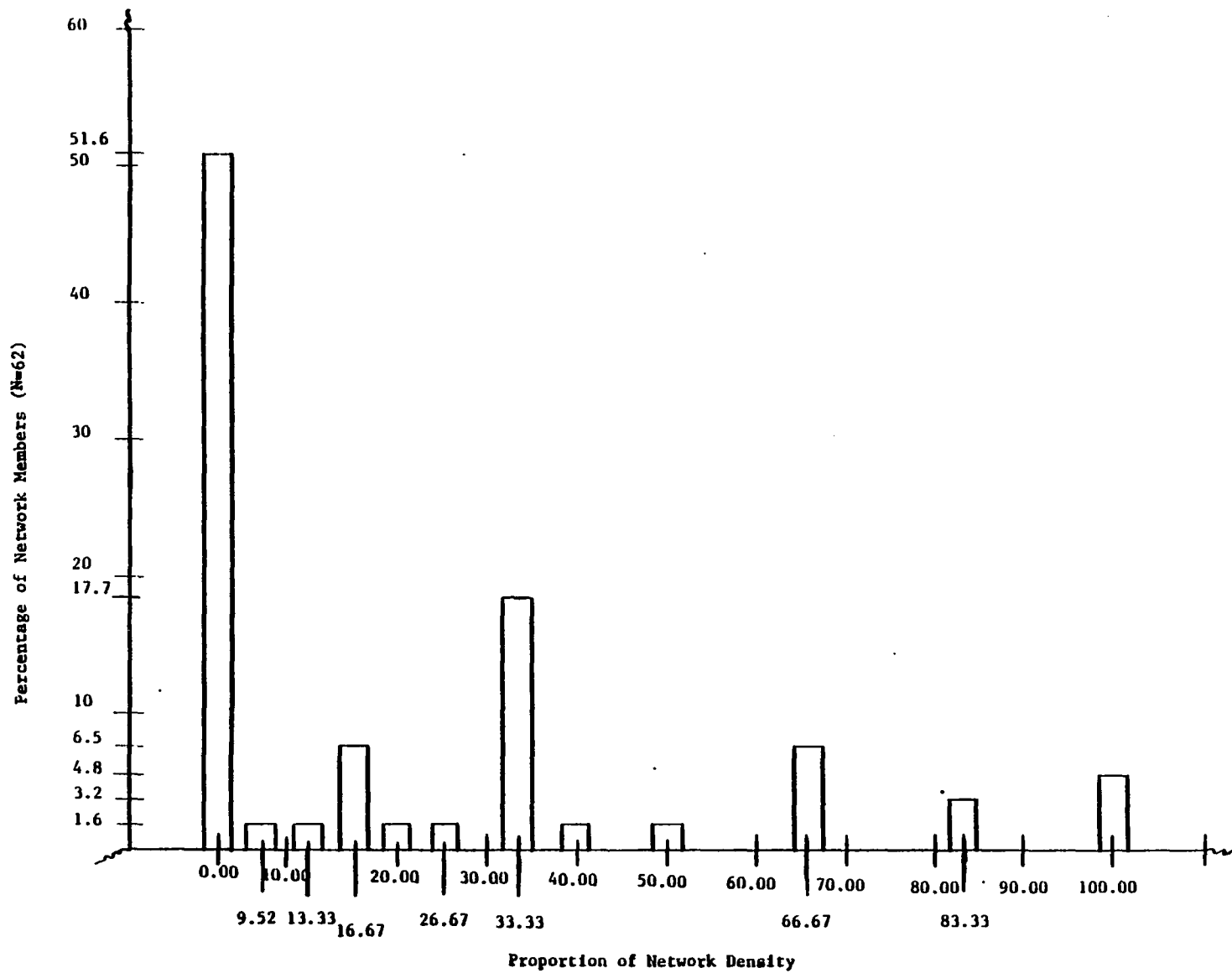
Figure 8.   Proportion of Network Density-Acquaintances for Middle-Level Administrators.

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administrators. The researcher's previous conclusion that middle-level administrators relied on network relationships beyond the primary order in order to access important information sources was supported.

The average proportion of density-acquaintances in the networks of women in top levels of the hierarchy was 3.3% and 6.7% for the middle-level administrators. The data also supported the finding that middle-level administrators had more weak or acquaintance relationships in their career networks than top-level administrators.

Based on Granovetter's (1973; 1982) research, on the strength of network ties, it was concluded that women in academic administration tended to have networks composed of members who were strongly tied to each other. These strongly tied networks provided the opportunity for the sharing of pertinent resources, to which each member had to access. This finding especially applied to top-level administrators who indicated that they only maintained network relationships with other top-level administrators (see Chapter IV—Types of Networks To Which Administrators Belonged).

Middle-level administrators indicated more weak ties (acquaintance relationships) with network members. Granovetter (1973) found that weak ties provided the opportunity for ego to gather more diffuse types of information because of strong ties in secondary or tertiary order networks. For example, a middle-level administrator with a weak tie to the secretary of a top-level administrator could conceivably gather pertinent information from the boss of the secretary through a weak network tie. Although the secretary is in the primary order of the administrator's network, the important information the administrator

wishes to gather is in the secretary's primary order relationship with her superior.

Taken in conjunction with Lin's (1982) assessment that the most important resources were      at the upper levels of the administrative hierarchy, administrators strived to maintain network relationships with those having access to the most pertinent resources through either direct or indirect relationships. It was hypothesized that the lower a woman's administrative position, the more she would rely on indirect relationships through secondary and tertiary order network relationships as a means of gathering influential information.

Wellman (1982) concluded that density research provided poor morphological information. He found that networks with highly similar density levels could differ greatly in their structural configurations. However, the combination of frequency and proportional data (Table 23) with the pictorial representation of density levels (see Figures 5, 6, 7, and 8) permitted the author to assess similarities and differences in the internal structure of career networks.

Data was summarized in Figures 5 thru 8 and depicted the internal structure of density-friends and density-acquaintances for administrators at both hierarchical levels. The clumping of network members around certain points on the density scale highlighted how mean standard deviation and proportion data were similar while the pictorial representation emphasized the differences in density structure. Wellman's (1982) concern that density data provided insufficient information was supported when an assessment of average density level for individual egos was not made. However, when data in figures 5 thru 8 was coupled with the information in Table 23, it was noted that

statistical calculations had differing internal structures. It was the pictorial representation that helped to pinpoint differences in structure. Both types of information provided the opportunity to identify similarities and differences in how top-level and middle-level administrators used their friends and acquaintances in the networking process.

Table 23

Summary of Density Statistics

|  | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|
| Density Measures | | |
| Density-friends | | |
| Mean | 56.79 | 58.40 |
| Standard Deviation | 36.67 | 33.30 |
| Average Proportion of Density-friends | 20.2% | 20.6% |
| Density-acquaintances | | |
| Mean | 15.85 | 21.39 |
| Standard Deviation | 22.24 | 29.22 |
| Average Proportion of Density-acquaintances | 3.3% | 6.7% |

## Interactional Characteristics

Interactional characteristics examined the nature of linkages between ego and her network members. The interactions considered most important in career network study were: (a) the level of similarity between ego and members (homogeneity), (b) the types of relationships which bonded ego and network members to each other (content), and (c) communications linkage between ego and members (directedness).

## Homogeneity

Breiger (1982) distinguished between internal and external homogeneity. Internal homogeneity was defined as the assessment of similarities which existed within the group while external homogeneity assessed similarities between groups. It was internal homogeneity that was the focus of similarities in career networks.

Homogeneity measured the level of similarity which existed between the respondents at each administrative level and their network members. Three variables were identified: age, social background, and career background. Final conclusions were reached by comparing the average number of persons with whom administrators were similar on each variable and the proportion of homogeneity in networks at each hierarchical level for each value. Noted in the "other" category were comments regarding commonalities which were easily classified into the variables listed on the research survey. Most commonly, respondents reported homogeneity in regards to a "concern for higher education," concern for a particular institution, concern for the needs of a certain position and work within a particular academic area, same area of academic study, collegial relationships, and mentor/teacher relationships. These comments were categorized as career related

commonalities.  Also listed were comments such as, "same political outlook," "neighbor," "family members," and "marriage."  These were classified as social background commonalities.

As stated by Barnes (1977), Fischer (1977), and Wilson (1983) individuals tended to associate with others who were most like themselves.  Since the networking process emphasized career orientation, it was assumed that the highest percentage of network members would have career background in common with respondents.  Data summarizing the levels of homogeneity administrators had with their network members supported this assumption (see Table 24).

Table 24

Average of the Average Number of Network Members With Whom Individual Administrators Had Homogenous Relationships

|  | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|
| **Homogeneity Variables** |  |  |
| Age in Common | 1.3 | 0.9 |
| Social Background in Common | 1.6 | 1.1 |
| Career Background in Common | 2.8 | 1.9 |

Note.  Data based on responses of 87 administrators.

Eighty-seven of the 88 respondents provided information regarding career background as a commonality with network members.  Some (19.5%) administrators noted that they did not have career background in common with any network members.  The mean number of network members with whom

the administrators had career background in common was 2.1 with a standard deviation of 1.7. The modal statistic was 2.

The average proportion of each administrative networks in which career was the commonality was 76.5% for top-level administrators and 58.0% for middle-level administrators. The difference indicated that top-level administrators selected to include more persons in their career networks with whom they had similar career positions, goals, and aspirations.

Top-level administrators also had higher levels of homogeneity with network members in relation to age and social background than did middle-level administrators. Of the 87 responding administrators, 51.5% had age in common with one or more network members. The mean number of network members with whom the administrators had age in common was .91 with a standard deviation of 1.41. The mode was 0--48.3% administrators indicated that they did not have age in common with network members.

Calculations of the average proportion of age as a commonality in each top-level administrator's network was 33.0% and 27.0% for middle-level administrators. These findings indicated that top-level administrators formed more relationships with individuals with whom they had age in common. This suggested that they affiliated with persons in their age cohort and provided support for the assumption that upper-level administrators most probably blended their personal and professional lives for career advancement purposes.

In accessing levels of commonality in relation to social background, the administrators noted that they had social background in common with 1.2 network members. The standard deviation was 1.46. The

modal statistic was 0--41.4% administrators indicated that social background was not a commonality in their network relationships. The average proportion of top-level administrators' networks in which social background was a factor was 46% and 33% for middle-level administrators. The data indicated that top-level administrators had a higher level of social background and activities in common with network members.

Summatively, the data revealed that top-level administrators had a higher number of network members with whom they shared commonalities on each of the identified variables. This indicated that top-level administrators developed personal and professional relationships with others more like themselves than junior administrators. Conclusions summarized previously (see Chapter V--Major Types of Networks to Which Administrators Belonged) noted that top-level administrators only affiliated with other top-level administrators. The data on homogeneity indicated that the similarities were more refined than just hierarchical position but tended to include aspects of their personal and social lives and perceptions as well as career goals, aspirations, and placement.

It seemed that women at the top developed career strategies similar to those of men as described by Hennig and Jardim (1977). These researchers stated that men made no distinctions between their personal and professional lives. They wrote, "[men] see one [personal and professional lives] as dependent on the other" (p. 36). This mesh was important in making necessary career contacts through relationships outside of the work environment. The high level of homogeneity on each of the variables in this research suggested that women at the top also

meshed their personal and professional responsibilities and lives for desired career advancement.

Lin (1982) discussed the principle of homophily and described it as "persons [who] ... tend to interact with others who are like themselves ... empirical data have shown that frequency of interaction and intensity of relationships are more likely to occur among individuals who share similar characteristics" (p. 133). Statistics supported the finding that women administrators in the University of North Carolina system were especially homogeneous in networking relationships that were career related. This finding was more applicable to top level administrators than middle-level administrators.

In summary, data on the measure of homogeneity indicated that the administrators tended to form networking relationships with individuals most like themselves. Data revealed that top-level administrators were more similar to their network members than middle-level administrators; however, both set of respondents indicated the highest levels of homogeneity in regard to career background. Overall, the data supported the assumption that career network relationships were fairly homogeneous, but the higher the hierarchical level of the respondent, the more homogeneous the networking relationships in general.

## Content

The study of content focused on the number of relationships an administrator had with a network member, strandedness. Strandedness was measured by actually counting the number of ties an administrator had with any one network member. Administrators were provided 15 possible ties to individual network members (see Questionnaire--Appendix C). If the administrator and the network

member were linked by one relationship, they had a uni-stranded relationship. If they were linked by two or more relationships, the administrator and the network member had a multi-stranded relationship.

On the average, administrators had 1.8 content ties with network members. Most administrators (35.6%) had uni-stranded network relationships as compared to 12.6% engaged in two-stranded ties, and 3.4% engaged in three stranded-ties. The four types of ties by which administrators were most often connected to network members were friends, superiors from past positions, other career related colleagues, and members of the same professional organizations.

The specific types of relationships by which administrators and network members were most often stranded are summarized in Table 25. These four relationships were rated highest from the list of 15 possible ties. Those deleted from the summary were rated at 12% or less by the respondents. Network relationships contained an average of 1.2 friendship ties and an average of 1.1 ties with superiors from past positions. Other career-related colleagues and members in the same professional organizations were rated as the third and fourth most frequently used ties. The average number of these ties was .78 and .74, respectively. Calculations of the average number of network members with whom administrators at both hierarchical levels maintained each type of strand are summarized in Table 25.

Table 25

Average of the Average Number of Persons With Whom Individual Adminis-
trators Maintained Each Type of Network Tie

| | Top-Level Administrator | Middle-Level Administrator |
|---|---|---|
| Type of Strand | | |
| Friendship/Acquaintance | 1.4 | 1.2 |
| Superior from Past Position | 1.0 | 1.2 |
| Other Career Related Colleagues | 1.3 | 0.7 |
| Members in the Same Organizations | 0.7 | 0.8 |

Note. The category "friendship/acquaintances" should have presented as
two distinct types of connections (see Questionnaire—#5D). Because
the categories were not distinguished, conclusions regarding friendship
ties may not be valid. Statistics based on responses of 87 adminis-
trators.


Administrators at both levels were most often tied to network

members who were classified as friends signified that career relation-

ships often developed into personal relationships. This finding

supported conclusions reached on homogeneity levels which indicated

that respondents, especially top-level administrators, formed relation-

ships with others most like themselves in arenas other than career

related situations. Friendships were viewed as beneficial because they

allowed administrators to engage in and to be included in informal

relationships and activities often cited as important in the networking

process (see Chapter V—Barriers to Network Inclusion).

Beyond the friendship tie commonality, top- and middle-level

administrators prioritized the focus of their network strandedness

differently. Middle-level administrators had more alliances with past

work superiors which suggested that they were tied to persons with whom

they had direct contact and who had the opportunity to observe them in their daily work routine. This direct contact factor seemed to serve as an important criteria for career network inclusion of middle-level administrators. Thus, finding that middle-level administrators had strong intra-campus networks composed of persons who were easily identifiable was logical. As noted by Moore (1983), personnel in higher education most often promoted through the administrative hierarchy in one institution rather than hired from the outside. For the junior-level administrator, persons with whom they had direct contact and who had the opportunity to observe them in their daily work routine served well as network members because of the ability to promote their advancement within the institution.

Upper-level administrators indicated less of a reliance on past superiors and more on colleagues in many career related arenas. Notations and comments revealed that their network members worked on campuses and organization throughout the nation. This finding support- ed the statement made by a top-level administrator that upper-level administrators probably had networks which were more amorphous; yet, they were stronger than those of middle-level administrators. Exper- tise and professional activities of top-level administrators resulted in others recognizing them and suggesting them for positions as they became available. This process of identification and recommendation occurred without frequent contact between the administrator and the network member.

Mitchell (1969), Kapferer (1969), and Wheldon (1969) agreed that multi-stranded relationships were more secure than uni-stranded rela- tionships. Data collected in this research did not support or negate

this finding. However, the large number of uni-stranded and double-stranded relationships indicated that women in academic administration had few relational ties to network members. This suggested that career networks, to a large degree, were developed for the specific purpose of promoting career advancement. The methods by which network members and administrators were stranded were usually by one or two of the identified ties. However, these strands tended to be strong bonds which increased in intensity after position acquisition as indicated in the discussion on the level of relationships after position acquisition (see Chapter IV--Anchorage).

In summary, the average administrator was stranded to her network members by one or two ties. The nature of the ties varied between the administrative levels. Top-level administrators had more unstructured network ties while middle-level administrators were tied to individuals who observed them on a daily basis. The data did not necessarily support the literature finding that uni-stranded relationships were less secure than multi-stranded relationships, but did suggest that the one or two ties by which administrators were bonded to network members were fairly strong.

## Directedness

The primary focus of directedness study was the assessment of the direction in which communication flowed between ego and network members. In accordance with Mitchell's (1969) research, communication flow between network members could be classified as either reciprocal or directed. In this study, direction of communication flow was assessed at three levels: (a) the respondent as the initiator of communication, (b) the network member as the initiator of

communication, or (c) initiation of communication flow was reciprocal. Final conclusions on directedness were obtained by comparing averages and proportions on communication flow for administrators at each hierarchical level.

The assessment of the average level of communication flow in the networks of individual administrators is summarized in Table 26.

Table 26

Average of the Average Number of Network Members with Whom Individual Administrators Engaged In Each Type of Communication Flow

|  | Top-Level Administrator | Middle-Level Administrator |
|---|---|---|
| Flow of Communication | | |
| Reciprocal | 1.3 | 1.1 |
| Administrator Initiated | 1.4 | 0.7 |
| Network Member Initiated | 0.7 | 0.9 |

Note. Data based on responses of 84 administrators.

Data highlighted a difference of .2% in the level of reciprocal communication flow between the administrative levels. This indicated that reciprocity in communication flow approximately was the same in career networks of women in academic administration.

However, differences in directed communication flow was noted. Top-level administrators indicated that they initiated communication more often than middle-level administrators. Junior-administrators indicated that their network communication was most often initiated by network members.

Computations on the average proportions of directedness within the administrators' networks provided additional support for conclusions previously stated. These data are summarized in Table 27.

Table 27

Average Proportion of Each Type of Communication Flow in Administrative Networks

|  | Top-Level Administrator | Middle-Level Administrator |
|---|---|---|
| Flow of Communication |  |  |
| Reciprocal | 35.2% | 33.6% |
| Administrator Initiated | 27.0% | 20.6% |
| Network Member Initiated | 25.2% | 31.1% |

Note. N=19 for top-level administrators. N=70 for middle-level administrators. Statistics do not equal 100% because 3 top-level administrators and 32 middle-level administrators did not respond.

Findings indicated that: (a) reciprocity levels were approximately the same for both administrative levels, (b) top-level administrators initiated communication more often than middle-level administrators, and (c) middle-level administrators were involved in networks where the network members most often initiated the flow of communication.

The data also indicated that within each hierarchical level, directed communications flow as quite different. Although top-level administrators had a higher proportion of directed network relationships where they initiated communications, there was a slight difference between this type of initiation and communication where the network member initiated the communication was sought. This suggested

that the type of directedness in top-level administrators' networks could possibly alter between both types of communication initiated although they tended to initiate communication more often. The difference between the two types of communication initiation for middle-level administrators was 10.5%. In most instances, middle-level administrators waited to be approached by their network members. Overall, these findings suggested that top-level administrators behaved more aggressively in their quest to gather information. Since they only formed relations with others at the upper echelons of the administrative hierarchy (see Major Types of Networks to Which Administrators Belonged), their career network relationships were most likely peer affiliations. Because they were involved with peers, top-level administrators were better able to display more outwardly aggressive behavior with network members.

Middle-level administrators, had less direct contact with those persons having access to influential information; therefore, they waited for others to contact them with pertinent information. Since middle-level administrators were not necessarily involved in career networks with peers, they may not have had the opportunity to express their aggressiveness as openly as the senior administrators. Aggressive behavior could be construed negatively for middle-level administrators. This conclusion was not meant to indicate that middle-level administrators were not aggressive in their career advancement pursuits but to suggest that hierarchical position within the organizational structure would only tolerate certain types of behavior from individuals at various levels of the administrative system.

Mitchell (1969) noted that some network relationships were clearly reciprocal while other relationships were clearly directed. In regards to career networks, directedness seemed to be influenced by the amount of power and prestige individuals in the network had. For middle-level administrators, communication flow was directed from the network members to the administrators because the respondents were most likely in a position of lesser power within the hierarchical structure. Top-level administrators noted communication flow which was directed from them because of the equality of power and prestige between network members and administrators.

## Functional Characteristics

The study of functional characteristics in social networks examined the positive support mechanisms provided for ego by network members. Three types of support were examined in the research of career networks: (a) affective or emotional support, (b) cognitive support, and (c) instrumental or tangible support (see Table 1). Conclusions were based on comparisons made between the levels of each type of support women at each hierarchical level received.

### Affective Support

Administrators receiving emotional support from network members were provided with a psychological sense of belonging, caring, emotional and moral support through the networking process. On the average, population data indicated that 2.1 network members provided respondents with affective support. Top- and middle-level administrators received affective support from an average of 1.9 and 2.1 network members, respectively.

The literature findings (Holt, 1981; MacConkey, 1980; Stent, 1974; Welch, 1981) were congruent with those reached in this study which noted that one of the primary functions of the career network acquisition of emotional support and encouragement. Specifically, Stent (1982) recorded that her interviewees found that their career network was like a giant conscious raising group. Holt (1981) noted that career networks served to combat isolation for women. Welch (1981) wrote that the higher a women moves up in administration, the more isolated she becomes. She needs to develop relationships with other women at her hierarchical level as a means of combating isolation. She added "probably the biggest benefits of effective networking are psychological--a sense of community" (p. 45). The provision of a psychological sense of well being and belonging seemed to be an important criteria for administrators in the selection of individual network members as well as the selection of network groups in which they participated.

## Cognitive Support

Network affiliations which provided cognitive support for administrators focused on the retrieval of pertinent career-related information. The administrators received cognitive support from 1.8 network members. Top-level administrators received cognitive support from an average of 2.1 network members and middle-level administrators received cognitive support from an average of 1.7 network members.

Analysis on the specific types of cognitive support administrators received from network members was based on selections from a list of eight categorical choices on various types of information network members provided revealed that administrators received information

pertaining to: (a) the availability of a position, (b) personal contacts, (c) descriptions of a position's function, and (d) strategies for success. Data summarized in Table 28 indicated the average number of network members providing administrators with specific types of information.

Table 28

Average of the Average Number of Network Members Providing Various Types of Cognitive Support for Individual Administrators

| Types of Cognitive Support | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|
| Availability of Position | 1.0 | 1.2 |
| Personal Contacts | 0.7 | 1.1 |
| Position Function | 1.0 | 1.0 |
| Strategy for Success | 1.2 | 0.9 |

Note. Statistics based on the responses of 87 administrators.

Findings indicated that: (a) larger numbers of middle-level administrators' network members were provided information related to acquisition of a position and (b) top-level administrators were most often provided with information pertaining to job success.

Literature findings (Fader, 1984; Green, 1982; Lin, 1981; Rawlins and Rawlins, 1983; Welch, 1981) indicated that an important function of network participation was the acquisition of information which was shared through informal communication channels in the organizational

structure. Welch (1981) noted that cognitive support is the pragmatic reward for network membership--members receive information, feedback, and referrals. While the aforementioned researchers generally agreed that network involvement was an excellent method of increasing the possibility of accessing pertinent information for career planning and development, they did not distinguish between top- and middle-level administrative groups nor did they identify the essence of a particular hierarchical level sought from network involvement. Findings in this study supported general conclusions that career networks provided a considerable amount of cognitive support. It also assisted in identifying the specific type of information women at each administrative level were provided through their network participation.

Instrumental Support

Instrumental support in career networks provided the administrators with some form of financial assistance. Based on the responses of 87 administrators, an assessment on the amounts of tangible support each administrator received from network members was conducted. The results indicated that an average of .03 network members provided instrumental support for administrators. Top-level and middle-level administrators revealed that an average of .03 network members provided them with instrumental support.

Although the literature findings did not address instrumental support through career network participation, comments indicated that tangible resources were made available to them (see Chapter IV--Anchorage, Defining Levels of Assistance). The respondents were most often provided monetary assistance to help defray costs of relocating for job acquisition and expenses for academic study. In

accordance with Lin's (1982) conclusion, instrumental ties were satisfactory when necessary tangible support was provided through the networking process. The provision of monetary assistance for relocation and educational pursuits was important in career networks.

The literature findings indicated that it was assumed that women would not relocate for job advancement (Fox, 1977; Moore and Sagaria, 1981) and emphasized that the key to advancing into higher-level positions was the earned doctorate (Ironside, 1982). Thus, instrumental support in the form of monetary assistance was a very important attribute of a career network relationship for women at both hierarchical levels although it was not often made available by network members. The ability to relocate and to obtain the terminal degree were assets in career advancement.

## Comparisons of Types of Support Provided

Calculations on the average number of persons providing administrators with each type of support and the average proportions of each administrator's network devoted to the various types of support network members are provided in Tables 29 and 30. These data helped to compare the levels of support administrators at each hierarchical level received most often and to compare the type of support most often provided within a hierarchical level.

Table 29

Average of the Average Number of Network Members Providing Each Type of
Support

| Types of Support | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|
| Affective Support | 1.9 | 2.1 |
| Cognitive Support | 2.1 | 1.7 |
| Instrumental Support | 0.3 | 0.3 |

Note. Statistics based on the responses of 87 administrators.

Table 30

Average Proportion of Each Type of Support Provided in Career Networks

| Types of Support | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|
| Affective Support | 44.3% | 62.6% |
| Cognitive Support | 65.8% | 59.3% |
| Instrumental Support | 4.8% | 8.3% |

Note. Statistics based on the responses of 87 administrators.
Respondents could select more than one type of support therefore
proportions total more than 100%.

The resulting data revealed that top- and middle-level administrators had differing levels of each type of support in their networks. Top-level administrators clearly noted that they received more cognitive support; while middle-level administrators noted that their support network relationships emphasized affective support.

This difference was interpreted to mean that top-level administrators were probably more secure in their roles as administrators and did not need as much encouragement or moral support while seeking higher levels or different types of positions. Therefore, the thrust of their network relationships was the acquisition of information regarding different positions in which they were interested. Middle-level administrators, on the other hand, had less experience in pursuing higher-level posts and were chronologically younger than the senior administrators. Therefore, they needed more assurances regarding their abilities and capabilities were more involved in affective network relationships.

The average number of network members providing instrumental assistance was much lower than the numbers providing cognitive and affective support (see Tables 29 and 30). The amount of instrumental support provided was the same for women at each administrative level. The provision of financial assistance was considered important because this type of instrumental support allowed women the opportunity to pursue certain career goals which might not be possible if monies were not available. Equal provision of instrumental support meant that top- and middle-level administrators were provided the same opportunities for acquiring funds to assist with reaching their goals.

Based on previously assessed data and written comments (see Chapter IV--Anchorage, Defining Levels of Assistance), the researcher reached several conclusions. First, since most top-level administrators had acquired the terminal degree (see Chapter IV - Demographics), instrumental support provided them financial assistance for relocation. Secondly, the conclusion that the doctorate was considered the key to entry into top-level administrative posts suggested that middle-level administrators received financial assistance for completing advanced study and this was an important ingredient in their career goals. The last major difference in the provision of instrumental support offered was in the type of financial assistance women at each administrator needed rather than the small numbers of individuals receiving this type of network support.

## The Impact of Gender on Network Support

Interviewees in Mary-Scott Welch's 1981 publication, Networking: The Great Way For Women To Get Ahead, expressed two opposing view points regarding the participation of men in women's career networks. Some

felt that men could fulfill a positive role in women's groups. These interviewees intimated that men assisted women with refining their skills in interacting with males. They contended that as administrators women needed to interact with members of both sexes, and it was not beneficial to create network environments devoid of men. Other interviewees felt that there was no place for men in women's career networks. They believed that men were more a hinderance than a help because their presence prevented women from expressing themselves freely and forming supportive alliances among themselves.

As discussed in the analysis of anchorage data (see Chapter IV--Anchorage) most network members were men, the ratio of male to female network members was approximately 2:1. Additional analyses confirmed that men and women fulfilled different roles as network members. These differences were noted for each administrative level as they pertained to level of assistance and types of support provided.

Levels of Assistance

Data in Tables 31 and 32 summarize the average number of individual network members providing each level of assistance and the average proportion of each type of assistance in career networks. Findings indicated similarities and differences in the roles men and women perform as career network members. Differences were noted between and within both hierarchical levels.

Table 31

Average of the Average Number of Network Members Providing Individual
Administrators with Each Level of Assistance By Gender

| | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|
| **Level of Assistance By Gender** | | |
| **Males** | | |
| Extremely Helpful | 1.7 | 1.4 |
| Helpful | 1.0 | 0.8 |
| Somewhat Helpful | 0.1 | 0.3 |
| **Females** | | |
| Extremely Helpful | 1.2 | 0.7 |
| Helpful | 0.8 | 0.5 |
| Somewhat Helpful | 0.3 | 0.4 |

Note. Twelve top-level and 59 middle-level administrators responded to
inquiries regarding gender and level of assistance of network members.

Table 32
Average Proportion of Career Network Members Providing Each Level of
Assistance By Gender

| | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|
| **Level of Assistance By Gender** | | |
| **Males** | | |
| Extremely Helpful | 52.4% | 45.6% |
| Helpful | 17.9% | 26.5% |
| Somewhat Helpful | 4.2% | 6.8% |
| **Females** | | |
| Extremely Helpful | 28.8% | 22.9% |
| Helpful | 18.1% | 15.6% |
| Somewhat Helpful | 6.3% | 10.6% |

Note. Twelve top-level and 59 middle-level administrators responded to
inquiries regarding gender and level of assistance of network members.
Proportions for each group do not total 100% because 16 administrators
did not respond.

Administrators at both hierarchical levels received more assis-
tance from male network members than females. This finding held true
for males as extremely helpful and helpful resources. At the somewhat
helpful level of assistance, top- and middle-level administrators noted
that female network members provided most assistance. This finding
indicated that women in academic administration generally identified
men as the most helpful network resources. The fact that very few male
network members were ranked as somewhat helpful resources suggested
that men were included as network members when they fulfilled a defi-
nite role for administrators. In other words, women administrators
were less likely to have casual relationships with males in their
networks.

In contrast, the data suggested that women administrators formed
more casual relationships with other women for retrieval of informa-
tion. The question of density levels became evident again. Did women
administrators form more weak ties with women network members as a
means of tapping into information sources in their network members'
primary order networks and form more strong ties with men as a means of
tapping into direct information sources? If questions were answered
positively, several analyses of gender roles in career networks could
be addressed.

As expected administrators at both hierarchical levels received
more assistance from male network members than females. However,
top-level administrators indicated more network relationships with
women than middle-level administrators. Top-level administrators
received a higher level of assistance from both extremely helpful and

helpful women resources. Middle-level administrators received more somewhat helpful support from women.

This finding indicated that as women advance administratively, their career development strategies included developing relationships with women despite the fact that most of the top-level administrators in organizations are men (Cummings, 1979; Fulton, 1982). As noted by Welch (1982), women at the top or pursuing positions at the top needed to develop a comraderie because of the psychological as well as cognitive benefits.

It also suggested that middle-level administrators who wished to pursue higher level positions needed to strengthen their relationships with women instead of focusing the majority of their attention on men in top-level posts as network members. This brings into focus the conclusions reached in Warihay's (1980) study that middle-level administrators did not perceive women at the top as being supportive of their career advancement concerns. Thus, it appeared that women in top-level and middle-level administrative posts needed to develop communications systems through the networking process to ensure that all members were provided and received the assistance desired.

## Types of Support

A concern identified as important to career networks of women administrators was the type of support most often provided by male and female network members. Data in Tables 33 and 34 highlight the similarities and differences in the type of support administrators received from male and female network members.

Table 33

Average of the Average Number of Network Members Providing Each Type of
Support by Gender

| Type of Support by Gender | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|
| Males | | |
| Affective Support | 1.1 | 0.9 |
| Cognitive Support | 1.2 | 1.2 |
| Instrumental Support | – | 0.2 |
| Females | | |
| Affective Support | 0.8 | 0.4 |
| Cognitive Support | 1.6 | 0.9 |
| Instrumental Support | 0.1 | 0.2 |

Note. Statistics based on the responses made by the following numbers
of administrators: top-level administrators--N = 12 (males), N = 9
(females); middle-level administrators--N = 65 (males--cognitive and
affective support), N = 66 (males--instrumental support), N = 41
(females--cognitive and affective support), N = 40 (females--instru-
mental support).

Table 34
Average Proportion of Career Network Members Providing Each Type of
Support by Gender

| Type of Support | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|
| **Males** | | |
| Affective Support | 25.3% | 27.6% |
| Cognitive Support | 33.6% | 27.6% |
| Instrumental Support | – | 6.2% |
| **Females** | | |
| Affective Support | 15.2% | 14.3% |
| Cognitive Support | 38.3% | 29.0% |
| Instrumental Support | 2.8% | 0.8% |

Note. Statistics based on the responses made by the following numbers of administrators: top-level administrators—N = 12 (males), N = 9 (females); middle-level administrators—N = 65 (males—cognitive and affective support), N = 66 (males—instrumental support), N = 41 (females—cognitive and affective support), N = 40 (females—instrumental support). Because all administrators did not provide requested data for both variables, proportions do not total 100%.

Data indicated that women in academic administration generally received higher amounts of each type of support from men; however, middle-level administrators received more support from their male network members than top-level administrators. As with the assessment on the levels of assistance, the data on types of support provided by gender were consistent in that middle-level administrators relied more heavily on men as their primary source of network support. This suggested that women in lower-level administrative positions viewed men as a more important entity in gathering information and encouragement for career advancement purposes than women.

Middle-level administrators indicated that they generally depended on men for emotional support and the acquisition of information. However, they received equal amounts of tangible support from male and female network members. Although they may have perceived women at the top as being less supportive of their career advancement pursuits (Warihay, 1980), this finding suggested that in some instances network members were provided the resources necessary for career advancement by other women. As noted previously, instrumental support focused on the provision of financial assistance for continuing educational endeavors and relocation. Ironside (1982) and Moore and Sagaria (1981) identified these actions as very important ingredients in career advancement. Thus, women providing middle-level administrators with instrumental aid indicated support for their career advancement attempts.

The data also indicated that top-level administrators received higher levels of each type of support from their female network members than did middle-level administrators. This suggested that the top-level administrators were more strongly bonded to their female

network members and were comfortable in relying on them for all types of support. The fact that top-level administrators only received tangible support from their women network members was considered very important. It emphasized that women at the top willingly supplied their peers with the assistance necessary to make certain kinds of career moves. In general, women provided each other with the support needed for reaching career advancement goals and objectives.

The findings helped to identify the gender of network members who most often provided the administrators with each kind of support. Welch (1981) concluded that women needed to secure network support from all who were available to them. Top-level administrators received more cognitive support, information, from men but received more emotional support from women network members. Middle-level administrators received more cognitive and affective support from men.

Women in top-level posts formed supportive bonds with each other. These bonds served as a mechanism for building peer groups which were based on developing and maintaining a psychological sense of well being among their members. This sense of psychological well being at the middle levels of administration was usually provided by men. Again demonstrating the dependence women in lower levels of administration had on men for affective support. However, it was noted that women did provide a fairly high level of affective support for middle-level administrators. This suggested that relationships between women in middle-level positions and women network members may be intensifying. The increase in relationships among middle-level respondents and women network members may focus the respondents beginning to understand and accept the idea that women can play an important role in their networks

or women at the top are actively seeking out middle-level administrators to include in their networking activities.

In summary, women in academic administration relied on male network members for assistance and support more often than they depended on women for these kinds of aid. However, women in top-level administrative positions indicated a stronger tendency to rely on women network members for assistance and support. Overall, the findings indicated that gender does have an impact on the types of and levels of assistance women in academic administration received from their network members.

## Summary

The assessment of social network characteristics as applied to women's career networks indicated that women at each hierarchical level generally used the networking process differently. Structurally, women's career networks contained three to four persons most of whom were white males. Members were described as being extremely helpful resource persons during job acquisition. The intensity of these relationships tended to remain the same after job acquisition; however, when a change occurred, top-level administrators indicated a decrease in relationships intensity while middle-level administrators indicated an increase in relationship intensity. Although top- and middle-level administrators indicated that their network members usually knew each other well, middle-level administrators depended on acquaintance relationships more often than top-level administrators.

Interactional relationships between administrators and network members indicated that they were most often similar in regards to their

career backgrounds. Top-level administrators were found to be more homogeneous with their network members in relationship to age and social background as well as career background more so than middle-level administrators. On a whole, administrators were connected to network members by one relational tie which focused on friend/acquaintance relationships or supervisor/supervisee relationships. Communication flow in network relationships was usually reciprocal. When the flow of communication was directed, top-level administrators were the initiators of communication and middle-level administrators waited to be approached by network members.

Career networks served three purposes for the administrators. They provided affective, cognitive, and instrumental support. Middle-level administrators received more affective support and top-level administrators received more cognitive support from network members. Cognitive support provided information regarding strategies for success for top-level administrators and making contacts about positions for middle-level administrators. Instrumental support provided administrators with financial aid to assist with educational pursuits and relocation.

Top-level administrators noted that they had more women in their networks and that they depended on women for more of each type of support than did middle-level administrators. Top-level administrators only received instrumental support from their female network members.

The respondents noted the "old boys network" as the biggest barrier to inclusion in networks. Life-cycle issues were also noted as reasons for non-inclusion. Top-level administrators were involved in

inter-campus horizontal network relationships and middle-level adminis-

trators were involved in intra-campus vertical networks.

CHAPTER VI

. ANALYSIS OF DATA ON CAREER DEVELOPMENT AND THE NETWORKING PROCESS


In addition to delineating the similarities and differences in how women in academic administration used the networking process, this research also identified how the networking process influenced women's career development strategies. Several aspects of career development were examined: (a) attitudes of respondents toward networking as a career advancement tool, (b) career advancement patterns with a focus on relocation, and (c) the relationship between networking and mentoring as a career advancement mechanism.

Data were analyzed using measures of central tendency, measures of correlation and measures of variability. Results were compared to identify similarities and differences in how women at each hierarchical level used the networking process as a part of their career development plans.

<div align="center">Attitudes of Administrators Toward Networking<br>As A Career Advancement Tool</div>

Based on a five category scale (see Research Question-naire—Appendix C), the administrators judged the importance of net-working, from "very important" to "of no importance," as a career advancement tool. Final conclusions were reached by comparing the average numbers of responses in each category for administrators at each hierarchical level. Frequency distributions, as summarized in Table 35 (see page 176), revealed that top- and middle-level

administrators viewed the role of networking in their career plans quite differently.

These data indicated that top-level administrators, generally rated networking as more important to their career development than middle-level administrators. The majority (85.8%) of the upper-level administrators rated networking at least as important to their career development plans while 63.2% of the middle-level administrators rated it at the important level or higher.

A difference of 22.6% indicated a difference in how administrators at both levels of the hierarchy judged the process. The finding suggested that top-level administrators not only responded more positively to networking as a career advancement tool, but they were more cognizant of the methods by which communications moved through organizational systems. This increased level of understanding lead them to develop personal and professional relationships as a means of accessing privileged resources.

Ranking the five categories of the scale from 1 to 5 with one representing "very important", the mean level of importance to career advancement for top-level administrators was 1.7 with a standard deviation of .39. These statistics indicated that top-level administrators varied very little in their assessments of the networking process. Using the same procedures, for middle-level administrators, the mean was 2.3 with a standard deviation of 1.44. Comparison of these data indicated that middle-level administrators had less positive attitudes toward networking than top-level administrators. Literature findings (Green, 1982; Morrison, 1981) provided insight into the negative aspects of networking. Stent (1983) addressed why top-level

administrators found it more appealing than middle-level administrators.

At the negative end of the scale, 21.8% middle-level administrators rated networking as a non-influential tool in their career advancement plans while 7.1% top-level administrators made a similar judgment. The difference of 14.7% indicated that administrative level had an impact on how women perceived the networking process. Middle-level administrators tended to view the process more negatively or as unimportant to their personal career development plans than top-level administrators. This finding supports Green's, Morrison's, and Stent's conclusions.

Green (1982) reported that networking permitted women administrators to form alliances which combated isolation as well as gather information. Similarly, Fader (1984) indicated that career-related information shared through the networking process was not advertised but shared through personal contact. McDonald (1979) wrote that participation in career networks served as a means of increasing an administrator's visibility and promotion potential. It seemed that top-level administrators generally held opinions of the networking process which were congruent with the findings of these researchers more often than middle-level administrators.

The finding that middle-level administrators viewed networking less favorably than top-level administrators raised the following question regarding the perception of networking as a process. Did middle-level administrators view network involvement less favorably because they had not realized the need for using networks? Stent (1978) in her interviews with the founders of Concerns, a network of top-level women academic administrators, intimated that it was the

top-level administrator or those aspiring to reach the top that needed to develop networking relationships. Because the highest hierarchical positions were handled behind the scenes, women wishing to advance to the highest level posts needed to rely on networking relationships for the acquisition of information. She also noted that the need for network involvement was not necessary for women who were not on track for top-level posts in academic administration.

In her doctoral dissertation conclusions, Sawyer (1982) found that the amount of network involvement was influenced by the administrators' hierarchical position level. She used deans and department heads as her research subjects. The author assumed that the title, deans, was equivalent to top-level positions, and department head was equivalent to middle-level positions as they were defined in this study (see Chapter I--Definition of Terms) and that hierarchical level did influence attitude toward career networking participation.

Table 35

Administrators' Judgement of the Importance of Networking in Their
Career Advancement Plans

|  | Population | | Top-Level Administrators | | Middle-Level Administrators | |
|---|---|---|---|---|---|---|
|  | Freq. | % | Freq. | % of Population | Freq. | % of Population |
| **Judgment of Networking** | | | | | | |
| Very Important | 41 | 40.6 | 6 | 42.9 | 35 | 40.2 |
| Important | 26 | 25.7 | 5 | 42.9 | 20 | 23.0 |
| Somewhat Important | 14 | 13.9 | 1 | 7.1 | 13 | 14.9 |
| Not Very Important | 7 | 6.9 | 1 | 7.1 | 6 | 6.9 |
| Of No Importance | 13 | 12.9 | – | – | 13 | 14.9 |
|  | 101 | 100.0 | 14 | 100.0 | 87 | 100.0 |

Note. Seventeen administrators did not rate the importance of net-
working in their career advancement plans.

## Career Advancement Patterns

As an initial step in assessing career advancement patterns, the
administrators were asked what their positions were before accepting
their current posts. Frequency statistics indicated that 42.7% admin-
istrators were in lower level administrative positions before acquiring
their current posts; 28.9% were in faculty-related positions—14.5% of
which were full-time faculty positions without any administrative
responsibilities and 20.5% were employed in positions such as
internships, public education, government service, or industry. These
data were uni-modal—most women were administrators in lower level
administrative positions. Data for both administrative levels revealed

that 47.1% upper-level and 41.0% middle-level administrators were in lower-level administrative posts before acquiring their current position.

In general, findings were similar to conclusions reached by Barrax (1984) and Moore (1983) regarding career advancement patterns of women in academic administration. Both researchers concluded that women did not necessarily follow standardized patterns in their career advancement pursuits and moved into academic administration from a variety of positions and backgrounds. Although the largest single percentage of respondents in this study was promoted from lower-level administrative positions, the responses confirmed that a total of 57.20% of the administrators acquired their positions from backgrounds other than lower-level administrative posts in academic settings.

The finding was important because it emphasized that women administrators could pursue administrative posts in academe without advancing through the standardized career pattern which male administrators pursued. This suggested that additional opportunities and avenues were open to women wishing to pursue administrative positions. Rather than focusing on a standardized pattern of career development as indicated in research conducted by Moore and Sagaria (1981), it seemed that women should concentrate their attention on developing expertise and competencies in their fields. These attributes served as important factors in career advancement for women no matter what their academic or professional backgrounds. This conclusion was supported by Morrison (1981) and Welch (1982). Each noted that there was no substitute for women exhibiting competency in completing tasks and letting others know it. Thus, developing systems

for recognition of skills and support was more important than attempting to move through standardized career advancement positions.

Notice was taken of the administrators (3.4%) who were previously higher level administrators. Written statements revealed that these administrators were usually younger, married, and mothers. Their comments indicated that they found their previous posts to be very rigorous when compounded with home and family responsibilities. Research conducted by Erazti (1983) emphasized that married administrators, especially those with smaller children, found it more difficult to pursue and maintain positions as academic administrators.

Additional research (Benton, 1980; Fraker, 1984; Pulley, 1979; Schwartz, 1983; Swoboda & Vanderbasch, 1983) pointed out that life cycle and career-related issues often created internal conflicts for many women and were used by some employers as reasons for not hiring women for administrative positions.

Based on the paucity of women citing life cycle reasons for their downward career moves, it appeared that conflicts surrounding such issues may not be as important in the lives of women currently holding administrative positions as they were for women administrators of earlier decades. The fact that career-family conflicts were cited did suggest that some women were continuing to struggle with life cycle issues and these issues continued to serve as prohibitors to career advancement in some instances.

As stated by Jones (1983) in her research on barriers which prohibited women from advancing administratively, life cycle issues were classified as internal and external barriers. In this study, life cycle issues were viewed as internal barriers because of the conflicting feelings the administrator imposed on themselves over their family

and career roles. They were viewed as external barriers because society exerted pressure on women to pursue one role over the other--preferably the family roles. Employers viewed life cycle conflicts and issues as prohibitors to women's career advancement. They believed that women would choose the family responsibilities over career responsibilities when conflicts occurred.

Despite the limited number of women reported life cycle conflicts, it was recognized that women often choose to ignore conflicting feelings they had regarding career and family issues. Therefore, it was assumed that the possibility of other women struggling with life cycle issues existed but administrators chose not to address them in the context of this study.

## Advancement in the University of North Carolina System

Half, 50.54%, of the 117 responding administrators noted that they had advanced within one campus of the University of North Carolina system. The same percentages of top- and middle-level administrators indicated internal campus advancement. The high percentage of women remaining at one institution was supported by research findings. Conclusions reached by Moore (1983) and Socolow (1976) indicated that institutions of higher learning tended to promote personnel rather than hire from the outside. Based on these findings, one could conclude that women administrators in the University of North Carolina system had a better opportunity for career advancement on a campus where they had developed a positive reputation as effective administrators and that administrative advancement was more likely in an inter-campus network system. Because of the scarcity of positions at the upper limits of the administrative hierarchy and the need for specialized skills, relocation or at least transference within the University

system was often required as a women sought more advanced positions. In these situations intra-campus networks would be essential.

The 58 respondents who were not promoted through intra-campus systems were asked if they transferred within the University of North Carolina system. A large percentage (44.83%) of the administrators responded positively. Data on transference revealed that 62.5% of the remaining top-level administrators and 42.0% of the remaining middle-level administrators transferred with the University system. Moore (1983) concluded that administrators tended to pursue career advancement opportunities within a particular type of institution. Women transferring within the University of North Carolina system seemed to exhibit an affinity for the practices and procedures of the University system as a whole and capitalized on the fact that they had developed support systems for recognition within the system. The data also suggested that top-level administrators made more moves within the University system in order to acquire higher-level positions than middle-level administrators.

<div align="center">Relocation</div>

As a facet of career development, relocation received considerable attention in the literature because employers often assumed that women were unwilling to relocate due to family and child rearing responsibilities (Fox, 1977; Moore, 1983; Moore & Sagaria, 1981). Several questions were posed to assess attitudes toward relocation, willingness to relocate, and geographic locations to which administrators would possibly relocate, e.g., (a) within North Carolina, (b) within the southern region, (c) national, and (d) international. The question of relocation was analyzed as it related to

three variables:   (a) administrative level, (b) age of the administra-
tors, and (c) marital status of the administrators.

## The Impact of Administrative Level on Relocation

The uncertainty coefficient was used to measure levels of asso-
ciation between administrative level and variables relating to relo-
cation.  Statistics of association ranged between .00 and .02 for all
variables measured.  Thus, a knowledge of an administrators' level in
the hierarchy did not increase the probability of correctly predicting
her willingness to relocate or her desire to relocate to specified
geographic areas.

Sixty-two (53.9%) administrators were interested in advancing
further in academic administration; 58.8% top-level administrators and
53.1% middle-level administrators reported a desire to pursue higher
level positions; 75.8% of the administrators desiring to advance were
willing to relocate for career advancement.  The large percentage of
women at each administrative level--88.9% top-level administrators and
73.7% middle-level administrators--were willing to relocate for career
advancement purposes.

Literature findings (Fox, 1977; Moore & Sargaria, 1981) discussed
women and their willingness to relocate in relatively general terms.
At no time did they differentiate between women working at various
administrative levels and the willingness to relocate.  Data in this
study suggested that women were willing to relocate for job advancement
and that top-level administrators were more willing to relocate for
career advancement than middle-level administrators. Statistical data
as summarized in Table 36 indicated that the largest percentage of the
population was willing to relocate within the southern region of the
country followed closely by a willingness to relocate on a national

basis. Of particular interest was the percentage of top-level adminis-
trators who were willing to relocate on an international basis. It
appeared that they had not put restrictions on their physical movements
for career advancement.

The Impact of Age on Relocation

The researcher questioned the impact of the administrator's age
range on their willingness to relocate for career advancement. Measure
of variable association were calculated using Pearson r. An overall
summative statistic of .24 indicated that there was a fairly strong
positive relationship between age range and willingness to relocate and
indicated as the administrators' age range increased their willingness
to relocate also increased.

The impact of age on the willingness to relocate to various
geographic locations ranged from no relationship (Pearson r = 0) to
very weak relationships (Pearson r = .20). The correlational
willingness to relocate within the state of North Carolina with age was
-.11. The negative direction indicated that as age increased the
willingness of the administrators to relocate within North Carolina
decreased. This suggested that older administrators rather than would
remain in the institution where they held their current positions
rather than relocate within the state.

Pearson r of 0 for willingness to relocate within the southern
region of the United States or on international basis indicated no
relationship between the variables. Relocation on a national basis was
measured at a very weak level. The -.06 statistic indicated that as
age increased there was a slight decrease in the willingness to relo-
cate.

In summary, the relationship between the willingness to relocate to various geographic locations and age was not strong. However, age had a fairly strong positive relationship on the overall willingness to relocate. This indicated that age did influence an administrators overall willingness to relocate but did not influence to where the administrators would relocate.

Table 36

Administrators' Willingness to Relocate to Identified Geographic Areas

|  | Population | | Top-Level Administrators | | Middle-Level Administrators | |
|---|---|---|---|---|---|---|
|  | Frequencies | % | Frequencies | % | Frequencies | % |
| Geographic Areas |  |  |  |  |  |  |
| Within NC | 29 | 55.8 | 6 | 75.0 | 23 | 52.3 |
| Within Southern Region | 34 | 66.7 | 7 | 87.5 | 27 | 62.8 |
| National | 33 | 63.5 | 5 | 62.5 | 28 | 63.6 |
| International | 18 | 34.6 | 4 | 50.0 | 14 | 31.8 |
|  | 114 |  | 22 |  | 92 |  |

Note. Frequencies and percentages exceed numbers of administrators indicating a willingness to relocate because categories were not mutually exclusive.

The Impact of Marital Status of Relocation

Frequency statistics on the marital status indicated that most administrators were married (See Chapter IV—Demographics). The literature findings (Benton, 1980; Ezrati, 1983; Fox, 1977; Moore & Sagaria, 1981; Schwartz, 1983; Swoboda & Vanderbasch, 1983) noted that marital status and life cycle issues were important factors in women making professional decisions. Relocation to assume administrative positions was affected by marital status in accordance with research findings in this study. Women who were unmarried for any reason reported more of a willingness to relocate for job advancement than women who were married. Uncertainty coefficient statistics indicated that the relationship between marital status and the willingness to relocate was a strong one. A statistic of .32 suggested that the

possibility of correctly predicting an administrator's willingness to relocate was increased if her marital status was known.

However, an assessment of willingness to relocate to various geographic areas and marital status was not as strong. Marital status had no relationship on willingness to relocate on an international basis, uncertainty coefficient of 0, and a very weak relationship between willingness to relocate within the state of North Carolina, uncertainty coefficient of .05. Thus, knowing the respondents' marital status did not increase the probability of predicting the willingness to relocate on an international basis and increased the ability to predict a willingness to relocate within North Carolina very slightly.

The relationship between marital status and willingness to relocate within the southern region of the United States and on a national basis were somewhat stronger, 1.7 and 1.0. Although, the statistics were not very strong, they indicated that the ability to predicated willingness to relocate to either of these geographic locations was increased when the respondents' marital status was known.

Overall, the data indicated that marital status had an impact on the willingness of an administrators' desire to relocate. The findings also indicated that marital status did not necessarily indicate to which geographic locations an administrator would relocate. Generally, knowing an administrators' marital status did help to determine if she was willing to relocate within the southern region and on a national basis.

## Relocation and Network Development

Forty-five (78.9%) of the 62 administrators who were willing to relocate for career advancement noted that they were developing networks in other geographic locations; 88.9% of the top-level

administrators and 77.1% of the middle-level administrators were developing networking relationships to assist with relocatiing to other areas. The data also revealed that top-level administrators were developing more network relationships in other areas to assist with relocating than middle-level administrators. Based upon Stent's (1978) interviews with the founders of a network of top-level academic administrators and Welch's (1981) assessment of the needs of women aspiring to reach the top, it was reasonable that top-level administrators were more involved in a broad scope of network activities. Not only did Stent and Welch record that the best positions were handled behind the scenes, as did Fader (1984), they cited that network participation was more necessary for women in pursuit of the positions at highest levels of administration because of the methods by which information about such positions was shared.

The results of this study were basically supportive of literature findings, (Moore, 1983; Moore & Sagaria, 1981). They indicated that women were generally willing to relocate. These findings held true when willingness to relocate was assessed in accordance with administrative level, age range, and marital status. Comparison of data for the administrative levels suggested that top-level administrators were more willing to relocate than middle-level administrators.

MacConkey (1980) wrote that women desiring to advance in academic administration should develop intra- and inter-campus networks as a means of developing communications linkages. As noted by researchers (Green, 1982; Fader, 1984; McDonald, 1979), the most influential positions were handled behind the scenes, thus, personal contacts were necessary for gathering information. Therefore, women wanting to

relocate would need to develop professional and personal ties in a variety of institutions to ascertain information concerning possible career advancement opportunities.

## Women Assisting Women

A concern of the study was the level of assistance the respondents provided for other women through the networking process. Data indicated that 73.9% of the 119 respondents noted that they were involved in networking activities which focused on assisting other women. Top-level administrators, 82.4%, and 72.5% middle-level administrators indicated that they were actively involved in assisting other women through network activities.

Finding such high percentages of women at both hierarchical levels engaged in positive networking with other women was important because comments made by some respondents on the research questionnaire and literature findings (Berry & Kushner, 1979; Horner, 1975; Mitchell, 1973; Tibbetts, 1979 a&b; Warihay, 1980) suggested that women were not supportive of each other. Undercurrents in the Hennig & Jardim (1977) book The Managerial Woman and the overall tone in the Welch (1981) book on networking gave credence to the necessity of women assisting women in career advancement attempts.

The data also showed that top-level administrators were more involved with assisting other women than middle-level administrators. This was not surprising as the findings in this research have repeatedly shown that women in higher-level positions perceived the networking process more positively and engaged in networking with other women more frequently than middle-level administrators.

Networking and Mentoring:  The Dual Relationship

The relationship between networking and mentoring was important in regards to career development.  Based on literature findings (Rawlins & Rawlins, 1983; Welch, 1981), it was concluded that the individuals serving as network members and mentors offered more assistance and support to the administrators.  Frequency statistics indicated that approximately one half of network members served in both roles.  Top- and middle-level administrators noted that 26 (48.1%) of their 57 and 96 (47.5%) of their 232 network members, respectively, served as network members and mentors.

On the average, 85 of the 88 administrators revealed that 1.4 of their network members were also mentors.  Approximately one-third of the administrators (31.8%) noted that they did not have any network members who served in the dual roles.  A total of 49.4% administrators indicated that they had 1 or 2 network members serving in the dual role.

Top-level administrators had an average of 1.7 network members who were also mentors.  Most (29.4%) indicated that they had one network member who was also a mentor.  Middle-level administrators had an average of 1.3 network members serving in both roles.  Unlike top-level administrators, middle-level administrators indicated that most (32.9%) of their network members did not serve in both roles.

Top-level administrators indicated that an average proportion of 42.0% and middle-level administrators indicated an average proportion of 40.7% people served in both roles.  This finding suggested that women in academic administration generally recognized the positiveness of combining the mentoring and networking roles to meet their individual needs.

These findings were considered important. The high percentage of administrators reporting individuals serving in both roles suggested that a positive relationship existed between mentoring and networking. The mentor-protege relationship was described as a one-on-one relationship where an experienced person provided advice and encouragement for a less experienced person (Ironside, 1982; McNeer, 1983; Phillips-Jones, 1982). The networking process was described as a group experience in which members provided each other with support, advice, and encouragement (Green, 1982; Rawlins & Rawlins, 1983; Welch, 1982). In the researcher's opinion, each relationship had the potential for introducing the administrator to the other relationship. For example, the mentoring relationship could serve to introduce an administrator into a system of people who could eventually become her network. On the other hand, participation in a network situation could allow an administrator the opportunity for meeting someone to serve in an one-on-one advisory role for career development. The roles of mentor and network member were not mutually exclusive; jointly, they seemed to provide an increased opportunity for career advancement possibilities. Although the mentor role emphasized a "couple-typed" relationship and the networking process emphasized group relationships, both provided support, information, advice, and counseling; they seemed to blend well as career advancement tools.

Identifying the types of support and assistance these individuals provided for the administrators was critical to understanding the essence of the connection between the two processes as well as increasing awareness of the processes individually. Data on the levels of assistance and the types of support administrators at both hierarchical levels received are summarized in Tables 37 and 38.

Table 37

Average of the Average Number of Network Members Who Were Also Mentors
Providing Each Level of Support for Individual Administrators

|  | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|
| Level of Assistance | | |
| Affective Support | 1.3 | 1.2 |
| Cognitive Support | 1.3 | 1.3 |
| Instrumental Support | 1.9 | 1.9 |

Note. Statistics based on the following data: top-level
administrators-- N = 11; middle-level administrators-- N = 50 for
mentors providing cognitive and affective support and N = 51 for
mentors providing instrumental support.

Table 38

Average of the Average Number of Network Members Who Were Also Mentors
Providing Each Type of Assistance for Individual Administrators

|  | Top-Level Administrators | Middle-Level Administrators |
|---|---|---|
| Type of Assistance | | |
| Extremely Helpful | 1.5 | 1.5 |
| Helpful | 0.6 | 0.4 |
| Somewhat Helpful | 0.2 | 0.3 |

Note. Statistics based on the following data: top-level
administrators-- N = 11; middle-level administrators-- N = 40 for
mentors providing extremely and helpful levels of assistance and N = 42
for mentors providing a somewhat helpful level of assistance.

The levels of each type of support administrators received from
persons serving in both roles were generally high. This suggested that
women administrators recognized that support provided through the
networking process was increased when the network member was also a

mentor. The finding was congruent with conclusions reached by Rawlins and Rawlins (1983) and Welch (1981) that the mentoring and networking processes do converge in a meaningful manner as a means of providing administrators additional support. The administrators noted that they received more instrumental support than cognitive or affective support from network members who were also mentors.

This finding was important because it identified the type of support administrators most often received when both roles were fulfilled by an individual. It appeared that if the network members knew an administrators through the group process and as an individual through the mentoring process, the extra effort required to provide monetary assistance was made. Because of the difficulties often associated with making financial assistance often associated the strength of the double bond might be a necessity in providing instrumental support.

Administrators at both hierarchical levels noted that individuals serving in both roles were most often judged as extremely helpful resources. High levels of extremely helpful assistance provided by these individuals endorsed the finding that persons serving in both roles also provided high levels of network support for the administrators. Coupled with those individuals who were labelled as helpful resources, an approximate average of 2.0 persons were in the dual role.

Overall, the findings on the levels of support and assistance network members strongly supported that individuals serving as network members and mentors provided high levels of assistance for the respondents. Thus, it appeared that women in academic administration profited from engaging in both processes with the same persons because of the increased probability for receiving affective, cognitive, and

instrumental support. Although persons serving in both roles were sometimes perceived to be only somewhat helpful, most individuals serving in both roles were judged to be at least helpful.

## Summary

While women at both hierarchical levels viewed their participation in networking as a valuable tool in career advancement plans, top-level administrators judged it more favorably than middle-level administrators. The senior-level administrators also indicated that they were more often engaged in assisting other women through the networking process than their juniors.

Several patterns for career advancement were recognized among the respondents. First, many of the administrators noted advancement within one campus of the University of North Carolina system and engaged in intra-campus networks. The second largest group of respondents indicated that they were advancing within the University of North Carolina system. These women engaged in intra- and inter-campus networks. A third group noted transferrance into the system.

Despite the finding that most women were advancing through the University of North Carolina system, many administrators indicated that they were willing to relocate to various geographic locations for job acquisition and career advancement purposes. Willingness to relocate was analyzed in relationship to three variables--administrative level, age level, and marital status. When administrative level was known, the willingness to relocate was not predictable. However, age range and marital status did have an impact on the willingness of women in academic administration to relocate for career advancement purposes.

Findings indicated that a fairly large number of network members also served as mentors. When network members served in the dual role,

they were identified by the administrators as extremely helpful re-sources who provided increased levels of support--especially instru-mental support.

CHAPTER VII

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This research investigated how women administrators in the University of North Carolina system used career networking for job acquisition and career advancement. The population of 119 participants included 17 top-level administrators and 102 middle-level administrators. Administrative levels were defined in accordance with position titles recognized by the University of North Carolina and each of its 16 constituent campuses.

Data were collected by disseminating an instrument developed by the researcher—questions were both open and closed ended. Analyses were based on various types of descriptive statistics. Many administrators wrote comments and, in some cases, lengthy letters of explanation which strengthened and increased the richness of the quantitative data base.

Profile of the Administrator

The 119 participants in this study were women administrators in top-level and middle-level administrative positions in the University of North Carolina system. The ratio of top- to middle-level administrators was 1:6. On the average, the respondents were 40-44 years old and more often married than single. The ethnic composition of the sample was almost equally divided between black and white women.

Generally, the administrators had completed masters level study; however, top-level administrators had usually obtained the doctoral degree. The average salary range was $25,000 - $29,000 per annum with a

substantial number of top-level administrators and middle-level adminis-
trators who directed programs requiring high levels of specialized
skills reporting annual salaries at $45,000 plus per year.

A sense of commitment to higher education was exemplified by the
finding that the average respondent had worked in the field from 11 to
15 years. However, the finding that the administrators had held their
current positions for five years or less supported the literature
finding (Fulton, 1983; Gappa & Uehling, 1979; Hennig & Jardim, 1977;
Welch, 1982) that women were not readily promoted through the
administrative hierarchy.

## Career Networking

Two major problems were identified as the foci of this research:
(a) the nature and usage of career network relationships by women in
academic administration and (b) the assessment of similarities and
differences of career networks of women in top-level and middle-level
administrative positions and how these similarities and differences
affected their career advancement strategies. Research findings in-
dicated that women in academic administration used the networking
process as a means of acquiring administrative positions. When compari-
sons of the most commonly accepted methods of job acquisition were made,
i.e., submitting resumes, responding to classified advertisements,
reliance on personal and professional relationships was cited as the
method of job acquisition most often used.

The research findings emphasized that women in top- and mid-
dle-level hierarchical positions used the networking process quite
differently. Thus, a major finding was that administrative level had an
impact on the type of networks in which women academicians held

memberships, the extensiveness of their network involvement, and their perceptions regarding the process as a useful career advancement tool.

Using eight of the social network characteristics identified in the typologies of Israel (1982) and Mitchell (1969), three major features of career networks were assessed: (a) their structure (morphological characteristics), (b) the nature of the interactions between ego and network members (interactional characteristics), and (c) the purposes for network membership (functional characteristics). There were many more differences than similarities in how women at each hierarchical level used the networking process.

## Organization of Networks

Top-level and middle-level administrators reported that their networks contained approximately 3-4 members who were usually men that knew each other well. The administrators classified most network members as extremely helpful resources. Top-level administrators indicated a stronger tendency to include women among their network members than did middle-level administrators. Middle-level administrators noted more of a reliance on acquaintances as network members than the senior-level administrators. Both sets of administrators cited that their network relationships tended to remain the same after acquisition of their current positions. However, when a change occurred top-level administrators noted a decrease in relationship intensity while middle-level administrators noted an increase in intensity.

Top-level administrators noted less structure among their network members than middle-level administrators and that they only formed network relationships with other top-level administrators. Middle-level

administrators cited more structure in their networks; they were composed of people from various hierarchical levels on their home campuses.

## Interactions in Networks

While administrators at both levels indicated that they had career backgrounds in common with network members, top-level administrators revealed a higher level of homogeneity with network members in regards to social background and age range. The previously noted finding that top-level administrators had more women in their networks showed that women at the top sought gender as a commonality in their network relationships more often than middle-level administrators. Communication flow between administrators and network members was most often reciprocal. However, when it was directed, top-level administrators initiated communication while middle-level administrators waited for network members to initiate communication. The nature of network strandedness showed that most administrators and network members were tied to each other by one or two relationships. Top-level administrators were tied to network members by relationships which broadened the administrators' potential for recognition of their expertise and competencies and career development possibilities, i.e., memberships in professional organizations, career related colleagues other than immediate supervisors. Middle-level administrators were stranded by relationships that focused on the daily work situations, i.e., immediate supervisors.

## Function of Career Networks

Top-level administrators clearly indicated that their network members most often provided information pertaining to strategies for

success while middle-level administrators indicated that their network members provided them with emotional support and encouragement. Very few network members provided either top-level or middle-level administrators with instrumental support, i.e., financial assistance. When financial assistance was provided, it was made available for relocation and educational endeavors. Top-level administrators noted that they only received instrumental support from their female network members.

## Career Development

Top-level administrators generally viewed the networking process more positively than middle-level administrators. Not only did they indicate that they were more involved with developing their own networks, top-level administrators noted that they were more actively involved in assisting other women through the networking process.

An important aspect of career development was the willingness of women to relocate for acquisition of certain positions. Top-level administrators indicated more of a willingness to relocate for job acquisition. Administrators of both hierarchical levels noted that marital status and age range influenced their willingness to relocate. Top-level administrators developed networks in a variety of geographic locations to assist with career advancement more so than middle-level administrators.

Most network members were men; however, the role of men was not as important in the networks of top-level administrators as it was in the networks of middle-level administrators. Data showed that women in top-level administrative positions were more likely to include women as network members than middle-level administrators and judged them as extremely helpful resources.

A last important aspect of the networking process was its relation-
ship to the mentor-protege process. Data showed that network members
who were also mentors provided administrators with more support than
network members who were not mentors.

## Conclusions

Career networks were studied from the preceptions of women academic
administrators. Findings were applied to eight social network charac-
teristics. Data indicate that women in academic administration rely on
the networking process as a means of acquiring their current positions
and judge it favorably as a career advancement tool.

This study was concerned with three questions: (1) do women in
academic administration use personal and professional relationships as a
career advancement tool? (2) which characteristics of social networks
are most applicable to career networks? (3) do all women in academic
administration use the networking process similarly? Based on these
questions, seven research hypothesis were developed. Findings on each
research hypothesis are discussed below.

## Hypothesis 1

> The higher a woman's position in academic adminis-
>
> tration, the more structure there is in her career
>
> network.

This hypothesis was not supported by research findings. Data show
that the women administrators have an average of 3-4 network members who
are usually considered as extremely helpful resources in job acquisition.
Network members are usually men. These structural characteristics of
career networks remain constant as women advance administratively.

Women in top-level administrative posts indicate less structure in their career networks than middle-level administrators. Several respondents at the highest levels of the hierarchy did not complete the questionnaire because they were unable to identify a specific structured grouping within their networks. Their comments show that although network relationships at the top are unstructured, they are binding. Top-level administrators who responded to the questionnaire noted a sense of unstructuredness in their networks also. While non-respondents indicate that their network members are geographically dispersed, respondents indicate that their network membership is more localized. In both instances, the relationships seem to be anchored in a recognition of the abilities and skills by her network members.

It appears that network members make necessary contacts with women at the top as positions become available through the "word-of-mouth" process. Recommendations and references emanate from the recognition of abilities, skills, and expertise although network members are not necessarily in frequent contact with administrators.

Top-level administrators show that they are cognizant of the conclusions reached by Green (1982) and Morrison (1981). These researchers noted that the key to successful networking is exhibiting competence and expertise in one's field of study and position not the fact that one engages in the networking process per se. Therefore, structured relationships which mandate constant contact are unnecessary. Network relationships which are anchored in recognition of ability seem more secure. As knowledge of a position's availability becomes known, network members link jobs and people together as a part of a natural process.

Middle-level administrators, who are responsible for directing programs requiring high levels of specialized knowledge and skill, function as the top-level administrators do in their networks. Relationships are more unstructured; recommendations and contacts are based on the recognition of expertise in an area of specialization. Other middle-level administrators have high levels of structure in their networks. Relationships are based on network members recognizing the administrator's _potential_ to succeed in higher level positions. These network relationships are highly localized--usually within the same campus with supervisors who have the opportunity to observe the administrator on a daily basis. Close observation and frequent contact are key ingredients in the development of career networks of middle-level administrators. The reliance of middle-level administrators on intra-campus networks is supported by conclusions reached in Moore's (1983) research. She noted that institutions of higher learning tend to promote individuals within the campus or system rather than hire from the outside.

McNeer (1983) noted that only a limited number of positions are available at the top of the hierarchy and there is always an excess of qualified people vying for these positions. The finding that the higher a woman's position or the higher an administrator's aspiration, the more she engages in geographically disperse networks as a means of broadening her possibilities for securing one of the scarce positions. The more disperse her network, the greater her possibilities of learning of select but limited positions. Thus, structured networks are viewed as less important than contacts with people in critical positions.

Hypothesis 2

Women in top-level positions in academic adminis-

tration have denser networks than women in mid-

dle-level administrative positions.

Analyzed data on the density variable did not support this hypothe-

sis. Findings indicate that the networks of women in top-level and

middle-level positions in academic administration have approximately the

same proportion of network members who know each other well (friends),

but middle-level administrators have a higher proportion of network.

members who are acquaintances than top-level administrators. This

finding relates directly to Granovetter's (1973) conclusions on the

strength of network ties. He noted that the level of diversity in

information shared among network members is affected by the strength of

relations among network members. The stronger network ties (friends

relationships) are the less diverse information shared within the network

because there is a higher probability that friends have access to the

same information sources. When networks are composed of weak ties

(acquaintances relationships), information shared within the network is

more diverse.

Based on Granovetter's (1973) research, the investigator reached

various conclusions. Since the most pertinent information in organiza-

tions is shared with those in the upper levels of the hierarchy (Lin

1982), it is valuable for women administrators to establish network

relationships with these individuals. In general, such relationships are

in the primary order network. Network members and administrators have a

direct relationship. Women in top-level posts obtain information through

their close-knit groups by developing diverse horizontal hierarchical

relationships. Although all network members are top-level administrators

and most know each other well, diversity is built into the network by

developing inter-campus affiliations, relationships with other organizations associated with higher education, and persons in various geographic locations.

Women in lower-level administrative posts maintain networks with a high proportion of members who know each other well; however, they obtain diverse information by developing network relationships with immediate supervisors and other persons with whom there is daily contact. Relationships are primarily vertical--networks are composed of supervisors as well as other professionals and non-professionals at various hierarchical levels.

Women with weak direct ties to persons who are strongly tied to individuals with desired information rely on higher order network relationships for acquiring information. This method of developing network relationships exemplifies the vertical design of the middle-level administrators' network. Top-level administrators rely on the indirect network relationships less often than the middle-level administrator. When this type of vertical network relationship develops among top-level administrators, it is intended to gather information from someone at the very highest levels of administration or from someone in other geographic locations.

The findings on the direct and indirect network relationships are supported by Mitchell's (1969) discussion of the higher order networks. He concluded that it is seldom necessary to trace networks beyond the secondary order, but developing higher order relationships is often essential. As a career advancement tool, acquaintance relationships may be traced to the secondary or tertiary order as a means of gathering the information most needed for career advancement.

Overall, women using networking as a career advancement tool rely on close-knit, strong tied or highly dense relationships to acquire information. Accessing diverse types of information is ascertained through the particular design of the administrator's network. The higher the administrative level or the higher the position a woman hopes to obtain, the more unstructured and geographically dispersed her network.

Hypothesis 3

> The higher a woman's position in academic adminis-
> tration, the more homogeneous are her network rela-
> tionships.

Research findings supported this hypothesis. Conclusions reached by Barnes (1977), Fischer (1977), and Wilson (1983) indicated that people tend to affiliate with others most like themselves. The emphasis of this research was on career orientation and affiliations. Data indicates that both top-level and middle-level administrators tend to have career background in common with network members.

The data show that top-level administrators maintain network relationships with others most like themselves. They engage in relationships with other top-level administrators exclusively. This finding is logical when conclusions reached by Lin (1982) are considered—individuals engage in networks with those having access to the most crucial resources hold positions at the upper limits of administrative hierarchy. Therefore, top-level administrators seek to form relationships with their peers or superiors who are also top-level administrators. She also indicates that people tend to participate with others in more prestigious positions. This also provides some

explanation as to why top-level administrators only affiliate with others in top-level posts.

Top-level administrators form network alliances with other women in a significant number of relationships. The bonding of women is important and helps negate research findings (Berry & Kushner, 1979; Horner, 1965; Mitchell, 1973; Tibbetts, 1979a) that women tend to be unsupportive of each other. However, the fact that middle-level administrators did not indicate a significant number of women among their network members supports conclusions reached by Warihay (1980)--that women in the lower levels of administration do not perceive themselves as being supported by women in senior-level positions. Berry and Kushner's (1979) conclusions regarding the "Queen Bee" syndrome and the interrelationships between women in administration are supportive of these findings.

The data also suggest that women in the top levels of administration blend their personal and professional lives. A significant number indicate that they have age and social background in common with network members. As noted in the research of Hennig and Jardim (1977), men blend their personal and professional lives as a means of gathering information and making the contacts necessary to assist with career advancement. Thus, a major finding in this research is that women in top-level administrative positions use their networks similarly to men. The blend of social and career backgrounds permits top-level administrators to blend their personal and professional lives as a means of acquiring needed information. Comments relating to the "old boys' network," and "old timers' network" as barriers to network inclusion for women may indicate that as women advance in administration, they are more accepted

by men and that they behave as men do by excluding their juniors from informal gatherings and information to which they have access.

Overall, women wishing to advance to the top levels of academic administration develop relationships with others who are most like themselves. These relationships include females as well as males and focus on similarities in the personal as well as professional arenas. It seems that the more network participants have in common, the stronger their network relationships.

Hypothesis 4

Women in middle-level academic administrative positions have more multistranded network relationships than women in top-level academic administrative positions.

This hypothesis was not supported by the research findings. The data indicate that women at both levels of the hierarchy are most often related to their network members by one tie. Very few administrators note three or more network ties. Findings show that top-level and middle-level administrators tend to be tied to network members by different types of strands. Strandedness for each hierarchical level seems to be related to the scope and extensiveness of network relationships.

Top-level administrators note that they are most often stranded to network members by relationships which focus on collegial relationships and memberships in professional organizations. Although the names of the organizations, clubs, and associations were not provided, data indicate that such relationships permit women to build recognition in the regional, national, and possibly international arenas. Women at the top

have a tendency to form relationships with other professional colleagues who provide depth to network relationships.

Middle-level administrators note that their network ties are highly concentrated among immediate supervisors. This type of strand suggests that daily contact in the work setting is important. The data show that the ties of middle-level administrators are more localized within a particular institutional setting.

Kapferer (1969), Mitchell (1969), and Wheeldon (1969) note that multistranded networks are more secure than unistranded networks because individuals are unable to withdraw from multiple relationships as easily as they can from single bonded relationships. Data on career networks was not congruent with this finding. Career networks are strongly anchored in one career related relationships; the nature of which varies in accordance with hierarchical position. Social and personal ties, i.e., family member, church member, teacher/student, classmate, represent a very small fraction of the types of relationships which have a bearing on the acquisition of administrative positions. These are considered as secondary ties which are helpful in making initial contact or acquiring initial information about a position's availability but are not the essence of network relationships as far as job acquisition is concerned.

Friendship is rated highly by both top-level and middle-level administrators as a type of network tie. It appears that network relationships begin with a shared career background and orientation. As the network relationship blossoms, it begins to encompass social and personal as well as professional life areas. Friendships emanate from the career related situations.

Overall, it was found that women engage in career networks which are strongly anchored on one career related relationship. As women advance in their careers, the number of ties does not necessarily change but the type of network strand changes. Changes focus on building relationships which assist with broadening the administrator's potential for exposure among her professional peers and colleagues. The friendship bond also becomes stronger as network relationships intensify.

Hypothesis 5

> The flow of information in the networks of women in
>
> top-level academic administrative positions is more
>
> reciprocal than it is in the networks of women in
>
> middle-level positions.

Data indicate that levels of reciprocity in communication flow in the networks of women at both hierarchical levels was approximately the same; therefore, the hypothesis is not supported. The finding that most network affiliations are based on reciprocal relationships indicates that individuals who engage in the network process are cognizant of the functional process of networking as described by Morrison (1981) and Rawlins and Rawlins (1983). These researchers summarized that networks are based on a mutual respect and benefit for participants. Rarely is the networking process based on a "one-for-one" situation.

The findings also reveal a difference in directed communication flows in accordance with hierarchical levels. Findings in this study are congruent with those stated by Mitchell (1969). He emphasized that some network relationships are clearly directed--one person has more influence and power in the network and assumes control for interactions. Middle-level administrators seem more passive in network roles when

relationships are directed. Data indicated that they wait for administrators to approach them with information. As noted by Harragan (1973), women often do not understand the essence of organizational structure—its undergirding on the military and athletic models, how information moves through it, or the ramifications of breaking the chain of command. Middle-level administrators show that they do respect the intracasies of organizational structure by assuming the passive roles in many network relationships. (It has been established that network members tend to be superiors).

Harragan's opinions were expressed in 1977; during these eight years women may have become more sophisticated in their understandings of organizations and how they function. The investigator wishes to note that she does not assume that middle-level administrators are not aggressive in their career advancement pursuits; she does assume that these women understand the importance of recognizing hierarchical positions of network members.

When communication flow was directed in top-level administrator's networks, they assume an aggressive role in acquiring information; they initiate the flow of communication. As noted previously, top-level administrators maintain network relationships with other top-level administrators exclusively. It appears that women at the top are allowed more latitude in dealing with their network members. She also concluded that literature findings regarding a lack of self-confidence and feelings of inferiority among women(Horner, 1975; Tibbetts, 1979a; Tibbetts, 1979b; Zeitz, 1983) are negated to some degree by the display of aggressive behavior in their quest to retrieve information. This

suggests that women at the top are generally comfortable in their dealings with men and as administrators in general.

Overall, women wishing to advance in their careers and those in high level post engage in networks which permit a mutual sharing of ideas and information. When the communication flow is not reciprocal, women should exhibit aggressive behavior to ascertain information they desire, keeping in mind the ramification of not recognizing organizational chains-of-command.

## Hypothesis 6

The higher a woman's position in academic adminis-

tration, the more she relies on network relationships

for the acquisition of information.

Based on the functional aspects of network participation as identified by Israel (1982), administrators identified three types of support received through network memberships--affective or emotional support, cognitive support or information, and instrumental or tangible support. While administrators at both levels indicate that they are provided each type of support, top-level administrators indicate that they are provided a higher level of cognitive support than affective or instrumental support. This finding supports the research hypothesis. Middle-level administrators note that they receive more affective support than the other types.

Literature findings (Campbell, 1983; Fader, 1984; Green, 1982; Holt, 1981; McDonald, 1979; McGee, 1979; MacConkey, 1980; Rawlins & Rawlins, 1983; Sawyer, 1982; Welch, 1981) value network participation for both affective and cognitive support. Stent (1978) provided some insight as to why the top-level administrators seek more cognitive support from

networks. She noted that women on track for top level posts belong to networks as a means of gathering information regarding the most prestigious positions because it is shared behind the scenes through professional and personal relationships. Women who are not on track for such positions may choose involvement in the networking process but are primarily provided with other types of support.

Middle-level administrators indicated that they received more affective support as a result of network involvement. This finding suggests that women in lower-level positions are very often concerned with developing relationships which provide them with encouragement in recognizing their promotional potential, recognizing their abilities and developing vital support systems as administrators.

The assessment of the types of information the administrators received through their networks provided additional support for conclusions already stated. Top-level administrators are provided with information regarding strategies for success in their positions. Middle-level administrators are provided with information which helps them with making contacts regarding the positions. As women advance in academic administration they become more concerned about information which helps them to understand the intracacies of functioning in top-level administrative positions.

Based on Ironside's (1982) finding that the terminal degree is the key to administrative advancement and Moore's (1980) finding that relocation is often necessary to pursue and acquire advanced positions, the researcher found that providing tangible support in the form of financial assistance for educational pursuits and relocation to be necessary if women are to advance through the administrative hierarchy as rapidly as

men. Research conducted by Fulton (1983), Gappa and Uehling (1979), Hennig and Jardim (1977), and Zeitz (1983) support the conclusion—as each of these investigators recognized that women in the 1980s are acquiring middle-level administrative posts but do not readily acquire positions at the top of the hierarchy.

Overall, as women advance in the administrative hierarchy, their attention focuses on networks that provide them with information. The higher the position the administrator seeks, the more she attempts to learn of the intricacies of succeeding in the position. Although some emotional support is provided through the network participation for top-level administrators, it is most often provided through the networks of women in lower levels of the hierarchy.

## Hypothesis 7

> Women in top levels of academic administration view
> networking as a more important factor in career
> development than women in the middle levels of
> academic administration.

Research findings support the hypothesis. Data show that women in top-level administrative posts view the networking process more positively than women in middle-level administrative positions. Based on conclusions reached by Fader (1982), Stent (1978), and Welch (1982), the investigator concluded that women at the top recognize that information regarding the most prestigious positions is shared by the word-of-mouth process and is usually not made public until critical decisions have been made.

On the other hand, it appears that middle-level administrators view the process as less important to their career development because they

may not have had to depend on networking as much in their acquisition of administrative positions. The link between the implementation of affirmative action policy (Safran, 1984; Travis, 1979) and the acquisition of administrative positions for women may account for how women in middle-level positions judge the process. As women sought administrative posts, they were granted entry level positions based on their credentials. Promotions at the lowest level of the mid-sections of the hierarchy were based on merit (Zeitz, 1983). Many women currently in middle-level administrative positions probably acquired their positions through a process similar to this. As noted by Gappa and Uehling (1979) promotions to higher level positions is a slow process. The author concluded that credentials alone are probably insufficient for the acquisition of such post because their availability is not generally known. Therefore, as the middle-level administrator seeks to advance in the hierarchy, she too begins to depend on the word-of-mouth process for sharing information about prestigious positions.

Overall, it appears that as women advance administratively, their opinions regarding networking may change. It is viewed as more important to career advancement and development as women seek to acquire positions at the top levels of the administrative hierarchy.

### Recommendations for Future Research

This research uncovered a wealth of information on a variety of career related issues for women in administration and management with a specific focus on the academic administrator. As an exploratory research investigation, many topics were identified which could be studied in future research projects. These potential research projects are outlined below:

1.  Detailed studies of each of the social network characteristics selected as applicable to career networks could be studied. Research on these areas could provide in-depth knowledge into how each network characteristic is used by academic administrators.

2.  Exploratory research applying social network characteristics not selected as a focus in this study could be conducted, i.e., intensity, durability, reachability, maintenance of social identity.

3.  Replication of this study using women in other career fields as ego, i.e., business and finance, medicine, government, public school administration would assist in generalizing knowledge on the usage of the network process by women administrators and managers.

4.  An assessment of the similarities and differences in the mentoring and networking processes and how these processes are combined to increase career advancement possibilities for women administrators.

5.  Replication of this study focusing on women administrators in academic settings other than a statewide university system, i.e., women's colleges, traditionally black colleges, community colleges. Results would provide information which could be generalized to further the understanding of how women administrators use the networking process.

6.  Replication ᴄ⁻ this study using males as ego would assist in comparing the usage of the networking process by males and females.

7.  An assessment of the similarities and differences of network strategies used by men and women at the highest level of academic administration would provide insight regarding the methodologies individuals use to acquire and to maintain the most prestigious positions in academic administration.

8.    A longitudinal study of this research would assist in identifying changes in attitudes and perceptions toward networking over extended periods of time.

9.    Replication of this study using other research methodologies, i.e., personal interviews would help to validate the results of this research.

10.    An in-depth study of the barriers to network participation and the negative ramifications of networking would be useful in identifying some of the weaknesses of the networking process.

11.    The replication of this study using entry-level administrators and middle-level administrators as the research focus could provide more general knowledge regarding the networking process.

12.    Detailed analyses comparing the roles of men and women as network members could provide information on the impact of gender on the level of assistance provided through the networking process.

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APPENDIX A

Request for Information--Letters and Forms

THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO

SCHOOL OF EDUCATION
GREENSBORO, NORTH CAROLINA    27412-5001

I am a doctoral student at UNC-Greensboro.  Currently, I am
seeking information to assist with my dissertation research on network
affiliations of women in academic administration.

For the purposes of my study, the following operational defini-
tions are being used:

a.    top-level    administrative    positions:    positions    of
      chancellor,  vice-chancellor,  associate  vice-chancellor,
      assistant  vice-chancellor  and  dean  (of  an  academic
      school).

b.    middle-level  administrative  positions:    positions  with
      job titles containing director, coordinator, registrar
      or dean (of a particular program).

Information received from UNC General Administration lists several
women on your campus who hold either top- or middle-level administra-
tive positions.  Attached is the list of names and positions of women
administrators on your campus.  Please make any corrections, deletions,
additions, etc., as may be necessary to update this list.

A self-addressed stamped envelope is enclosed for your convenience
in returning this information.

Your cooperation is greatly appreciated.

                                   Sincerely,


                                   (Ms.) Mary R. Cannie


MRC/dec
Enclosure

NAME OF INSTITUTION _____

DIRECTOR OF INSTITUTION RESEARCH _____


WOMEN IN TOP-LEVEL ADMINISTRATIVE POSITIONS:

Name                                              Title




OTHERS:



WOMEN IN MIDDLE-LEVEL ADMINISTRATIVE POSITIONS:

Name                                              Title




OTHERS:



07/12/84

THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO

SCHOOL OF EDUCATION
GREENSBORO, NORTH CAROLINA    27412-5001

On July 19, 1984, the attached information was forwarded to your office requesting information regarding women administrators on your campus.

To date, my records indicate that the requested information for your institution has not been returned.  It is necessary to have the names of those women serving in top- and middle-level administrative positions on your campus in order to identify the sample participants in my dissertation research.

Again, I have enclosed a self-addressed stamped envelope for your convenience in returning the information.

    Your attention to this request is greatly appreciated.

Sincerely,


(Ms.) Mary R. Cannie
Doctoral Candidate,
Educational Administration


Dr. Roland H. Nelson
Committee Chairman

MR/dec
Enclosures

APPENDIX B

Cover Letters and Correspondence Used in
Collecting Data

THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO

SCHOOL OF EDUCATION
GREENSBORO, NORTH CAROLINA    27412-5001

I am a doctoral student conducting my dissertation research on women in academic administration and how they use network relationships for career advancement.

Currently, I am pretesting research instrument and asking select female assistant program directors at UNC-Greensboro to complete the survey. As you complete the instrument, please indicate if you have difficulty in understanding or answering any of the questions. Feel free to comment on any aspect of the survey that causes you concern.

It should take approximately 20 minutes to complete the survey. If it should take much longer than 20 minutes, please inform me of this factor.

As with any survey, your responses will be held in the very strictest of confidence. Comments will only be used for the purpose of refining the instrument for the main study.

I will hand collect the survey on the afternoon of Tuesday, September 25, 1984. Your time and attention are very greatly appreciated.

Sincerely,


(Ms.) Mary R. Cannie
Doctoral Candidate/Educational
Administration

MRC/dec

THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO

SCHOOL OF EDUCATION
GREENSBORO, NORTH CAROLINA    27412-5001

I am a doctoral student conducting my dissertation research on women in academic administration and how they use network relationships for career advancement.

Currently, I am conducting a second pretest of my research instrument and asking select female assistant program directors at UNC-Greensboro to complete the survey. As you complete the instrument, please indicate if you have difficulty in understanding or answering any of the questions. Feel free to comment on any aspect of the survey that causes you concern.

It should take approximately 20 minutes to complete the survey. If it should take much longer than 20 minutes, please inform me of this factor.

As with any survey, your responses will be held in the very strictest of confidence. Comments will only be used for the purpose of refining the instrument for the main study.

I will hand collect the survey on the afternoon of Thursday, September 27, 1984. Your time and attention are very greatly appreciated.

Sincerely,


(Ms.) Mary R. Cannie
Doctoral Candidate/Educational
Administration

MRC/dec

THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO

SCHOOL OF EDUCATION
GREENSBORO, NORTH CAROLINA    27412-5001

    This letter comes to express my sincere thanks for your participation in pretesting the questionnaire developed for my dissertation research on career networks of women in academic administration.  Your input was invaluable and your time and attention were greatly appreciated.

    Thank you once again for your cooperation.


                              Sincerely yours,



                              (Ms.) Mary R. Cannie
                              Doctoral Candidate
                              Educational Administration

MRC/dec

THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO

SCHOOL OF EDUCATION
GREENSBORO, NORTH CAROLINA    27412-5001

Dear


       Currently, I am doctoral candidate at UNC-Greensboro conducting my
dissertation research on women in academic administration in the UNC
system.   I am particularly interested in the role of networking in
career advancement.

       The purpose of this letter is to ask your participation in the
survey relative to my research.  As there are only a limited number of
women qualified to participate in this study, your cooperation is
invaluable.  Completion of the survey should take approximately twenty
minutes.  Your responses will be held in the strictest of confidence.
Results will not be reported in a manner which will allow you to be
identified as an individual.

       A self-addressed stamped envelope is enclosed for your convenience
in returning the completed survey.

       Your time and attention are greatly appreciated.

                                        Very sincerely yours,



                                        (Ms.) Mary Cannie
                                        Doctoral Candidate/Educational
                                        Administration

MRC/rdb
Enclosure

SAMPLE REMINDER POSTCARD

October 12, 1984

Dear

This note comes as a reminder that a copy of my
dissertation survey on career networks of women in
academic administration was mailed to you during
the past week. Please complete it and return it
at your earliest convenience.

If you have already returned the survey, this
note comes as a "thank you" for your prompt
attention.

Sincerely yours,

(Ms.) Mary R. Cannie
Doctoral Candidate,
Educational Administration

THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO

SCHOOL OF EDUCATION
GREENSBORO, NORTH CAROLINA    27412-5001

A copy of the questionnaire developed for my dissertation research on career networks of women in academic administration was forwarded to you earlier this month.  In accordance with my records your completed questionnaire has not been returned.

Because of the limited number. of women in the sample, your responses are very much needed in order to ascertain reliable results. In case the original information did not reach your office or has been misplaced, a second questionnaire is enclosed.  It is realized how busy administrators are at this time; however, it should take no longer than than twenty minutes to complete the instrument.

Several of the previously returned questionnaire had the code on the back of the last page removed.  The purpose of the code is to identify the respondee in case additional information should be needed. No one has access to the code list other than the researcher.  Your responses will be held in the strictest of confidence.  Results will not be reported in a manner which will allow anyone to identify you as an individual.

Your completed questionnaire is needed by November 2, 1984.  A stamped self-addressed envelope is enclosed for your convenience in returning the survey.

Your time and attention to this request are greatly appreciated.

Respectfully yours,


(Ms.) Mary R. Cannie
Doctoral Candidate,
Educational Administration


Enclosure

THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO

SCHOOL OF EDUCATION
GREENSBORO, NORTH CAROLINA    27412-5001

Two copies of the questionnaire for my dissertation research on career networks of women in academic administration were forwarded to you during the month of October. According to my records, your completed instrument has not been returned.

Response to the questionnaire has been positive. However, your input is considered invaluable. The results of this study will help women in academic administration and those women who are aspiring to obtain administrative positions by increasing awareness of how women use personal and professional relationships as a career advancement tool.

Perhaps the instrument has not reached your office. Please find a copy of the questionnaire and a self-addressed envelope for your convenience in returning it.

As stated in previously mailed correspondence, confidentiality of your responses is guaranteed. Results will not be reported in a manner which will allow anyone to identify you as an individual.

Please return the questionnaire by November 17, 1984.

I close thanking you for your time and attention to this request.

Respectfully yours,

(Ms.) Mary R. Cannie
Doctoral Candidate
Educational Administration

Enclosure

THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO

SCHOOL OF EDUCATION
GREENSBORO, NORTH CAROLINA    27412-5001

Several copies of the questionnaire developed for my dissertation research on career networks of women in academic administration were mailed to you.    In    accordance    with    my    records,    your    completed questionnaire was not returned.

Currently, I am trying to ascertain why some administrators did not complete the questionnaire.  Enclosed is a self-addressed postcard with  possible  reasons  for  your  non-response.  Please  check  any responses that apply to your situation.  Feel free to make any comments which you deem necessary.

Please return the non-response postcard by December 5, 1984.

Thank you again for your time and attention.

Sincerely yours,


(Ms.) Mary R. Cannie
Doctoral Candidate,
Educational Administration


Enclosure

SAMPLE NON-RESPONSE POSTCARD

November 27, 1984

Dear Ms. Cannie:

I did not return the questionnaire for the following reason(s):

_____   It was too long; I did not have time to complete it.

_____   I felt that the questions were too personal.

_____   I was not interested in the research topic.

_____   I did not feel that the research applied to my situation.

_____   I had planned to return it but missed the deadline stated in the cover letter.

_____   Other: explain:

# APPENDIX C

**Request Questionnaire**

SURVEY ON CAREER NETWORKS OF WOMEN
ACADEMIC ADMINISTRATORS

The purpose of this research investigation is to assess how women in academic administration use networking as part of their career planning and movement. Your completion of this survey will be greatly appreciated. <u>Confidentially of your responses will be maintained at all times.</u>

## Directions

For each question or statement, check the most appropriate answer. If necessary, explain your answer in the space provided. Feel free to attach additional sheets if the space provided is insufficient for your explanations. Special directions are given for particular questions as needed.

Survey on Career Networks

Exact Position Title _____

1. Which of the following did you use in obtaining your current position?
   (Check all that apply)

   _____ Personal and professional relationships
   _____ Professional organizations
   _____ Newspaper advertisement - local North Carolina newspaper
   _____ Newspaper advertisement - nationally known newspaper
   (i.e.: Washington Post; New York Times)
   _____ Classified advertisement - The Chronicle of Higher
   Education
   _____ Other professional literature or announcement
   _____ General distribution of your resume received a positive
   response
   _____ Other; Explain:

   (If you did not check personal or professional relationships, move to #9)

2. List the initials of those persons who provided you with assistance
   while seeking your current position. (Six spaces have been provided;
   you are not required to list six people; list more or fewer than six
   people as your particular situation indicates).

   _____      _____      _____      _____      _____      _____
     A          B          C          D          E          F

3.  Individuals probably offered you different levels of assistance while
    seeking your current position.  Briefly describe what you would mean
    if you were to say that a person was extremely helpful, helpful, or
    somewhat helpful in providing you with assistance in your career
    advancement.  Space has been provided for your description of each
    term.

    a.  Extremely Helpful

    b.  Helpful

    c.  Somewhat Helpful

4.  In accordance with your personal descriptions listed in question 3, categorize the individuals identified in question 2 who comprise your career network as extremely helpful (EH), helpful(H), or somewhat helpful (SH) to your career advancement. In the grid below, identify the level of assistance each person offered you by placing a check in the appropriate column.

| Person | Initials | Levels of Assistance | | |
|---|---|---|---|---|
| | | EH | H | SH |
| A | | | | |
| B | | | | |
| C | | | | |
| D | | | | |
| E | | | | |
| F | | | | |
| | | | | |
| | | | | |
| | | | | |

5. Let A, B, C, etc., represent the people listed in question 4. Check one response to each item, for each person, unless otherwise indicated.

|  | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| **a. Sex of Person:** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| **b. Ethnicity of Person:** |  |  |  |  |  |  |
| Black |  |  |  |  |  |  |
| White |  |  |  |  |  |  |
| Asian |  |  |  |  |  |  |
| American Indian |  |  |  |  |  |  |
| Hispanic |  |  |  |  |  |  |
| Other; Explain |  |  |  |  |  |  |
| **c. This person and you have the following attributes in common: (Check all that apply)** |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |
| Social Background |  |  |  |  |  |  |
| Career Background |  |  |  |  |  |  |
| Other; Explain |  |  |  |  |  |  |

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|  | A | B | C | D | E | F |
|---|---|---|---|---|---|---|

d. What was your relationship with this person while seeking your current position? (Check all that apply)

Work superior - past position _____

Work peer - past position _____

Work subordinate - past position

Work superior - current position

Work peer - current position _____

Work subordinate - current position _____

Other career-related colleague _____

Member of same professional organization(s) _____

Friend/acquaintance _____

Family Member _____

Neighbor _____

Classmate _____

Teacher/Student _____

Member of same church _____

Member of same social/ civic organization _____

Other_____

e. This person provided the following type(s) of support (Check all that apply):

Knowledge about position _____

Emotional support and encouragement_____

Financial support _____

Making personal contacts _____

Arranged critical interviews and meetings _____

|   | A | B | C | D | E | F |
|---|---|---|---|---|---|---|

f. This person provided you with the following types of information (Check all that apply):

Professional literature _____

Notification of position's availability _____

Description of position's functions _____

Identification of valuable contacts _____

Strategies for success _____

Possibilities for upward mobility _____

Other _____

g. Did you perceive this person to be your mentor?

Yes _____

No _____

h. Initiation of communication between this person and me was:

Reciprocal _____

You made most contacts _____

He/She made most contacts _____

i. Since acquiring your current position, the level of contact you have with this person is:

The same as it was while seeking the position _____

Greater than it was while seeking the position _____

Less than it was while seeking the position _____

No Contact _____

6. It is necessary to know a little about the relationships that members of your career network have with each other. Please draw solid lines (_____) connecting those people who know each other very well and dotted lines (———————) connecting those people who are acquaintances. Do not draw lines between those people who have never met. (If there are more than six people in your network, add the letters you selected previously to represent them to the diagram below).


                                A



F                                                                B



E                                                                C




                                D



7. Your network members are

    _____ Professionals at the same hierarchical administrative level
    _____ Professionals at various hierarchical levels
    _____ Professionals and non-professionals
    _____ Other; Explain:


8. Your network members currently

    _____ All work at the same institution
    _____ Work at various colleges and universities
    _____ Work in academic and non-academic organizations
    _____ Other; Explain:

9. Sometimes women have difficulty becoming members of informal professional networks. Please briefly describe any difficulties you may have encountered.

10. Before accepting your current position, were you a:
_____ Full-time administrator in a lower position
_____ Full-time administrator in a higher position
_____ Full-time administrator in a position on a horizontal line to your current position
_____ Full-time faculty
_____ Part-time administrator/part-time faculty
_____ Other; Explain:

11. Do you have faculty ranking?
_____ Yes                    _____ No
                               (Move to #13)

12. What is your faculty rank?
_____ Full professor
_____ Associate professor
_____ Assistant professor
_____ Lecturer
_____ Instructor
_____ Adjunct faculty
_____ Other; Explain:

13. Is your current position at the same institution as your immediate past position?
_____ Yes                    _____ No
(Move to #15)

14. Was your immediate past position within the UNC system?

_____ Yes                              _____ No

15. Are you planning to pursue a higher position in academic adminis-
    tration in the future?

    _____ Yes                          _____ No
                                          (Move to #19)

16. If necessary, would you relocate in order to pursue this position?

    _____ Yes                          _____ No
                                          (Move to #19)

17. To where would you relocate? (Check any that apply)

    _____ Statewide
    _____ Southern region
    _____ National
    _____ International

18. Are you actively developing relationships with people on a state-
    wide, regional, national, or international basis to assist you in
    achieving this goal?

    _____ Yes                          _____ No

19. How would you judge the group described in question 5 (or a similar
    type group) as a factor in your future career development plans?

    _____ Very important factor
    _____ Important factor
    _____ Somewhat important factor
    _____ Not very important
    _____ Of no importance

20. Are you currently involved in any activities or organizations which
    permit you to assist other women with career advancement?

    _____ Yes                          _____ No

Personal Information

21.  List degrees you currently hold:

22.  Your ethnicity:
_____ Black                    _____ American Indian
_____ White                    _____ Hispanic
_____ Asian                    _____ Other; Explain:

23.  Your age range:
_____ Less than 30 years       _____ 45 - 49 years
_____ 30 - 34 years            _____ 50 - 54 years
_____ 35 - 39 years            _____ 55 - 59 years
_____ 40 - 44 years            _____ 60 + years

24.  Approximately how long have you worked in higher education?
_____ less than one year       _____ 16 - 20 years
_____ 1 - 5 years              _____ 21 + years
_____ 6 - 10 years
_____ 11 - 15 years

25.  Approximately how long have you held your current position?
_____ years

26.  Your current salary range:
_____ Less than $15,000        _____ $30 - 34,999
_____ $15 - 19,999             _____ $35 - 39,999
_____ $20 - 24,999             _____ $40 - 44,999
_____ $25 - 29,999             _____ $45,000 +

27.  Your current marital status:
_____ never married            _____ divorced/separated
_____ married                  _____ widowed

Thank you for your time and attention in completing this survey.

Please use the stamped, addressed envelope to return it.  In case the envelope is misplaced, the survey should be returned to:

> Ms. Mary R. Cannie
> 548 Dacian Road
> Raleigh, North Carolina  27610-3540

APPENDIX D

MISCELLANY

GARY T. BARNES                              TELEPHONE:   (919) 962-6981
ASSOCIATE VICE
PRESIDENT FOR
PLANNING

June 26, 1985


Ms. Mary R. Cannie
548 Dacian Road
Raleigh, North Carolina    27610

Dear Ms. Cannie:

Enclosed are:

1.   The definiton of the personnel category "Executive, Adminis-
     trative, and Managerial" and,

2.   The list of women employed on September 30, 1983, by each UNC
     constituent institution who were assigned to this category.

Remember that each institution interprets the definition a little
differently, so you will want to talk further with institutional staff
before you conduct a survey.

     You will note that we do not have addresses and/or titles for some
of these women.  Again, the institution will be able to furnish you
with these.  Finally, there has certainly been some turnover in these
positions since September, 1983, that you will want to investigate.

     If I can be of further assistance, please feel free to call on me
again.

                                        Cordially,



                                        Gary Barnes

bfs
Encl.

OCCUPATIONAL ACTIVITY CATEGORY DEFINTIONS

THE OCCUPATIONAL ACTIVITY CODE GROUPS EMPLOYEES INTO RATHER BROAD CATEGORIES ACCORDING TO THEIR MAJOR FUNCTION. THE CATEGORIES REQUIRED BY THE OCR AND EEOC REPORTS ARE VERY SIMILAR TO THE MANPOWER CATEGORIES IN THE 2ND FIELD REVIEW EDITION OF THE NCHEM'S TECHNICAL REPORT NUMBER 67. THE CODES TO BE USED WITH DEFINITIONS FOLLOW.

10 - EXECUTIVE, ADMINISTRATIVE, AND MANAGERIAL
INCLUDE ALL PERSONS WHOSE ASSIGNMENTS REQUIRE PRIMARY (AND MAJOR) RESPONSIBILITY FOR MANAGEMENT OF THE INSTITUTION, OR A CUSTOMARILY RECOGNIZED DEPARTMENT OF SUBDIVISION THEREOF. ASSIGNMENTS REQUIRE THE PERFORMANCE OF WORK DIRECTLY RELATED TO MANAGEMENT POLICIES OR GENERAL BUSINESS OPERATIONS OF THE INSTITUTION, DEPARTMENT, OR SUBDIVISION, ETC.

IT IS ASSUMED THAT ASSIGNMENTS IN THIS CATEGORY CUSTOMARILY AND REGUARLY REQUIRE THE INDIVIDUAL TO EXERCISE DISCRETION AND INDEPENDENT JUDGMENT, AND TO DIRECT THE WORK OF OTHERS. REPORT IN THIS CATEGORY ALL OFFICERS HOLDING SUCH TITLES AS PRESIDENT, VICE PRESIDENT, DEAN, DIRECTOR, OR THE EQUIVALENTS, AS WELL AS OFFICERS SUBORDINATE TO ANY OF THESE ADMINISTRATORS WITH SUCH TITLES AS ASSOCIATE DEAN, ASSISTANT DEAN, EXECUTIVE OFFICER OR AN ACADEMIC DEPARTMENT (CHAIR-PERSON, HEAD, OR THE EQUIVALENT) IF THEIR PRINCIPAL ACTIVITY IS ADMINISTRATIVE. NOTE: SUPERVISORY PERSONNEL OF THE TECHNICAL, CLERICAL, CRAFT, AND CUSTODIAL FORCE ARE TO BE REPORTED WITHIN THOSE SPECIFIC CATEGORIES WHEN THEY ARE NOT WORKING AT THE EXECUTIVE/ADMINISTRATIVE/MANAGERIAL LEVEL.

EXAMPLES FOR CODE 10:
CHANCELLOR
VICE CHANCELLOR AND ASSOCIATES/ASSISTANTS
CHIEF AND ASSISTANT ACADEMIC DEANS AND DIVISION HEADS
DEPARTMENT HEADS IF FTE(FULL-TIME EQUIVALENT) AS DEPARTMENT HEAD
    IS GREATER THAN .5
DIRECTORS AND ASSISTANT DIRECTORS OF DEPARTMENTS OR UNITS (BOTH
    ACADEMIC AND NON-ACADEMIC)
CHIEF AND ASSITANT REGISTRATION/ADMISSIONS OFFICER
DIRECTOR OR COMPUTER CENTERS OR DATA PROCESSING
CHIEF AND ASSISTANT FINANCIAL AID OFFICERS
DIRECTOR OF INSTITUTIONAL RESEARCH

OCCUPATIONAL ACTIVITY CATEGORY DEFINTIONS

20 - <u>INSTRUTIONAL FACULTY</u>
INCLUDE ALL PERSONS WHOSE SPECIFIC ASSIGNMENTS CUSTOMARILY ARE MADE FOR THE PURPOSE OF CONDUCTING INSTRUCTION, RESEARCH, OR PUBLIC SERVICE AS A PRINCIPAL ACTIVITY(S), AND WHO HOLD ACADEMIC RANK TITLES OF PROFESSOR, INSTRUCTOR, LECTURER, OR THE EQUIVALENT OF ANY OF THESE ACADEMIC RANKS. REPORT IN THIS CATEGORY DEANS, DIRECTORS, OR THE EQUIVALENTS, AS WELL AS ASSOCIATE DEANS, ASSISTANT DEANS, AND EXECUTIVE OFFICERS OF ACADEMIC DEPARTMENTS (CHAIRPERSONS, HEADS, OR THE EQUIVALENT) IF THEIR PRINCIPAL ACTIVITY IS <u>INSTRUCTIONAL</u>. DO NOT INCLUDE STUDENT TEACHING OR RESEARCH ASSISTANTS IN THIS CATEGORY.

EXAMPLES FOR CODE 20:
TEACHING AND/OR RESEARCH FACULTY WHEN FTE IN TEACHING/RESEARCH IS AT LEAST .5
DEPARTMENT HEAD IF FTE IS AT LEAST .5 IN TEACHING/RESEARCH

2X - <u>TEACHING (OR RESEARCH) ASSISTANTS OR ASSOCIATES</u>
INCLUDE JUNIOR FACULTY MEMBERS WITH THE TITLES OF TEACHING/RESEARCH ASSISTANT OR ASSOCIATE. STUDENTS EMPLOYED UNDER A COLLEGE WORK/STUDY PROGRAM ARE NOT TO BE INCLUDED IN THIS REPORT BUT RATHER IN THE FINANCIAL AID REPORT, CCR B3.

24 - INCLUDE IN CODE 20 FOR EEC-6 REPORT, CODE 20 for OCR REPORT
25 - INCLUDE IN CODE 30 FOR EEC-6 REPORT, CODE 20 for OCR REPORT
26 - INCLUDE IN CODE 40 FOR EEC-6 REPORT, CODE 20 for OCR REPORT

30 - <u>PROFESSIONAL (OTHER THAN EXECUTIVE/ADMINISTRATIVE/MANAGERIAL, DEANS, DEPARTMENT CHAIRMAN, OR FACULTY</u>
INCLUDE IN THIS CATEGORY PERSONS WHOSE ASSIGNMENTS REQUIRE A BACCALAUREATE DEGREE, OR ITS EQUIVALENT. ALSO INCLUDE ALL STAFF MEMBERS WITH ASSIGNMENTS THAT REQUIRE SPECIALIZED PROFESSIONAL TRAINING WHO WERE NOT REPORTED IN THE CATEGORIES ABOVE AND WHO CANNOT BE CLASSIFIED UNDER ANY OF THE FOUR 'NONPROFESSIONAL' CATEGORIES BELOW. EXAMPLES WOULD BE LIBRARIANS, LAWYERS, PHYSICIANS, ETC., WHO DO NOT HOLD ADMINISTRATIVE POSITIONS, OR HAVE FACULTY RANK.

# OCCUPATIONAL ACTIVITY CATEGORY DEFINTIONS

**40 - TECHNICAL AND PARAPROFESSIONALS**

INCLUDE ALL PERSONS WHOSE ASSIGNMENTS REQUIRE SPECIALIZED KNOWLEDGE OR SILLS WHICH MY BE ACQUIRED THROUGH EXPERIENCE OR ACADEMIC WORK SUCH AS IS OFFERED IN MANY TWO-YEAR TECHNICAL INSTITUTES, COMMUNITY COLLEGES, JUNIOR COLLEGES, OR THROUGH EQUIVALENT ON-THE-JOB TRAINING. INCLUDE COMPUTER PROGRAMMERS AND OPERATORS, DRAFTSMEN, ENGINEERING AIDES, JUNIOR ENGINEERS, MATHEMATICAL AIDES, LICENSED, PRACTICAL, OR VOCATIONAL NURSES, DIETITIANS, PHOTOGRAPHERS, RADIO OPERATORS, SCIENTIFIC ASSISTANTS, TECHNICAL ILLUSTRATORS, TECHNICIANS (MEDICAL, DENTAL, ELECTRONIC-PHYSICAL SCIENCES), AND SIMILAR OCCUPTATIONS NOT PROPERLY CLASSIFIABLE IN OTHER OCCUPATIONAL ACTIVITY CATEGORIES BUT WHICH ARE DEFINED BY THE INSTITUTION AS TECHNICAL ASSIGNEMENTS. INCLUDE ALL PERSONNEL WHO PERFORM SOME OF THE DUTIES OF A PROFESSIONAL OR TECHNICIAN IN A SUPPORTIVE ROLE, WHICH USUALLY REQUIRES LESS FORMAL TRAINING AND/OR EXPERIENCE NORMALLY REQUIRED FOR PROFESSIONAL OR TECHNICAL STATUS. SUCH POSITIONS MAY FALL WITHIN AN IDENTIFIED PATTERN OF STAFF DEVELOPMENT AND PROMOTION UNDER # 'NEW CAREERS' CONCEPT.

**50 - CLERICAL AND SECRETARIAL**

INCLUDE ALL PERSONS WHO ASSIGNEMTNS TYPICALLY ARE ASSOCIATED WITH CLERICAL ACTIVITIES OR ARE SPECIFICALLY OF A SECRETARIAL NATURE. INCLUDE PERSONNEL WHO ARE RESPONSIBLE FOR INTERNAL AND EXTERNAL COMMUNICATIONS, RECORDING AND RETRIEVAL OR DATA (OTHER THAN COMPUTER PROGRAMMERS) AND/OR INFORMATION, AND OTHER PAPER WORK REQUIRED IN AN OFFICE, SUCH AS BOOKKEEPERS, STENOGRAPHERS, ETC. INCLUDE ALSO SALES CLERKS SUCH AS THOSE EMPLOYED FULL-TIME IN THE BOOKSTORE, AND LIBRARY CLERKS WHO ARE NOT RECOGNIZED AS LIBRARIANS.

**60 - SKILLED CRAFTS**

INCLUDE ALL PERSONS WHOSE ASSIGNMENTS TYPICALLY REQUIRE SPECIAL MANUAL SKILLS AND A THOROUGH AND COMPREHENSIVE KNOWLEDGE OF THE PROCESSES INVOLVED IN THE WORK, ACQUIRED THROUGH ON-THE-JOB TRAINING AND EXPERIENCES, OR THOROUGH APPRENTICESHIP OR OTHER FORMAL TRAINING PROGRAMS. INCLUDE MECHANICS AND REPAIRMEN, ELECTRICIANS, STATIONARY ENGINEERS, SKILLED MACHINISTS, CARPENTERS COMPOSITORS, TYPE-SETTERS, ETC.

**70 - SERVICE/MAINTENANCE**

INCLUDE PERSONS WHO ASSIGNMENTS REQUIRE LIMITED DEGREES OR PREVIOUSLY ACQUIRED SKILLS AND KNOWLEDGE AND IN WHICH WORKERS PERFORM DUTIES WHICH RESULT IN OR CONTRIBUTE TO THE COMFORT, CONVENIENCE, AND HYGIENE OR PERSONNEL AND THE UPKEEP AND CARE OF BUILDING, FACILITIES, OR GROUNDS OF THE INSTITUTIONAL PROPERTY. INCLUDE CHAUFFEURS, LAUNDRY AND DRY CLEANING OPERATIVES, CAFETERIA AND RESTAURANT WORKERS, TRUCK DRIVERS, BUS DRIVERS, GARAGE LABORERS, CUSTODIAL PERSONNEL, GARDENERS, AND GROUNDSKEEPERS, REFUSE COLLECTORS, CONSTRUCTION LABORERS, SECURITY PERSONNEL, ETC.

**THE UNIVERSITY OF NORTH CAROLINA
AT GREENSBORO**

SCHOOL OF EDUCATION
GREENSBORO, NORTH CAROLINA    27412-5001

Dear Madame:

I am a doctoral student at UNC - Greensboro.  Currently, I am seeking
information to assit with my dissertation research on career network
affiliations of women in academic administration.  Your organization is
listed in Mary-Scott Welch's book, Networking: The Great Way For Women
To Get Ahead as a group concerned with orienting women to various
facets of career-related issues.

As I engage in my research, I would like to talk with the members of
your network or read any literature which you have developed.  This
will greatly help in developing my understanding of the structure,
purposes, extensiveness, procedures, etc., of women's career networks.

If it is possible, I would like to arrange a meeting with you to
discuss your network.  I can be reached at the address above or by
telephone at    .

I close anxiously awaiting your answer.

Sincerely,


(Ms.) Mary R. Cannie
Doctoral Candidate,
Educational Administration