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AN INVESTIGATION OF CAREER DEVELOPMENT BY  
COMMUNITY COLLEGE AND UNIVERSITY WOMEN:  
IMPORTANCE OF CONTRIBUTORS TO  
ADVANCEMENT INTO HIGHER  
EDUCATION ADMINISTRATION

by

LYNDA A. KUYPER

A dissertation submitted in partial fulfillment  
of the requirements  
for the degree of Doctor of Education in  
the Department of Educational Services at  
the University of Central Florida  
Orlando, Florida

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Major Professor: Larry R. Hudson

## ABSTRACT

Surveys of women in higher education administrative positions that identified factors which may contribute to career development have been conducted. However, the literature revealed little information regarding the importance placed on those factors by women in higher education administrative positions. The purpose of this study was to determine the importance of selected contributors to career development of women in higher education administration.

Data were gathered by a mailed questionnaire to a sample of women administrators employed in Florida state supported community colleges and universities. The 343 useable returned questionnaires represented a 65.5% response rate and 51.3% of the total population.

These data were evaluated in terms of: a) the factors identified by women, b) race and age, c) administrative level by institution type, and d) institution type. Descriptive data analysis was conducted using frequency distributions and histograms. Crosstabulation analysis with all statistical options and a oneway analysis of variance were also utilized.

There were four factors considered important for which there were no significant differences across the variables of institution type, administrative level by institution type, and selected demographic characteristics. These factors were formal education, willingness to accept added responsibility, timing, and communication skills.

The contributing factors showing importance by administrative level by institution type were: chance, participation in a formal administrative internship, committee appointments, and teaching experience. Those factors viewed as important by institution type were: willingness to relocate (community college) and research and publications (university). The factors viewed important by race were personnel administration skills and prior administrative experience. The factors considered important by age were: a) Affirmative Action plans, b) influence of a mentor, c) personnel administration skills, d) participation in a formal administrative internship, and e) research.

The results of the study indicated that women desiring to advance into higher education administrative positions should develop a career plan to include the institution type desired for career development. In addition, women should give serious consideration to the four factors showing no significant difference by institution type, administrative level by institution type, or by selected demographic characteristics.

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## INTRODUCTION

Considerable research on the advancement of women into the ranks of higher education administration has been conducted (Adkison & Bailey, 1980; Adkison & Warren, 1980; Alexander & Scott, 1983; Andre' & Edwards, 1978; Capek, 1982; Frances & Mensel, 1981; Green, 1984; Hemming, 1982; Kelly, 1982; McNeer, 1983; Moore, 1982a; Moore & Sagaria, 1981; Sagaria & Moore, 1983; Schein, 1978; Schmuck, 1975a, 1975b; Tickamyer & Bokemeier, 1984). These researchers sought to: (a) identify reasons few women retain positions in higher education administration, (b) evaluate preparation strategies for advancing women into higher education administration, (c) identify administrative levels and areas in which women have experienced gain, (d) suggest strategies for survival, (e) define advocacy activities, and (f) ascertain perspectives by women of women advancing into higher education administration. Although women have experienced gains, research has indicated women are still administratively underrepresented in higher education (Baugher & Martin, 1981; Casey & Stolte, 1981; Epstein & Wood, 1984; Green, 1984; Hittman, 1980; Krohn, 1974; Levandowski, 1977; Loomis & Wild, 1978; McLure & McLure,

1976; Moore, 1982b; National Association of State Universities and Land Grant Colleges, 1979; Walkins, 1985). The advent of Affirmative Action plans (1968) for higher education represented a quantum step toward non-discrimination against women in the areas of advancement opportunity, equal pay, and hiring practices. Tidwell (1981) indicated that the promotion of women and minorities in academia is influenced by the attitudes and behaviors of persons already in academia. Tidwell further indicated that significant advancements in affirmative action programs cannot occur until it is realized by university personnel that universities are still often centers of white male dominance and privilege. It was additionally stipulated by Tidwell that equal employment will not be realized until those in universities understand that a significant number of the failures attributed to affirmative action endeavors are directly related to the maintenance of the "white male club" (p. 122).

Various reasons describing why women have not advanced in higher education administration as rapidly as anticipated have been termed barriers (Baugher & Martin, 1981; Bowers & Hummel, 1979; Burkhardt, 1979; Casey & Stolte, 1981; Ernst, 1982; Estler, 1977; Hemming, 1982; Hooyman & Kaplan, 1976; Kanter, 1977; Kieuit, 1974; Loomis & Wild, 1978; Moore, 1982a, 1984; Muhich, 1973; Schmuck, 1975a,

1975b; Shakeshaft, Gilligan, & Pierce, 1984; Shavlik & Touchton, 1984; Uehling, 1973). The barriers identified in the literature include sex-stereotyping of certain types and levels of administrative positions, institutional recruitment and hiring practices, formal and informal communication networks, and training. Women have used various means to overcome these barriers including formal education, mentoring, networking, institutes, experience, internships, and identification programs (Adkison & Bailey, 1980; Adkison & Warren, 1980; Andre' & Edwards, 1978; Bolton, 1980; Jackson, 1979; McGannon, 1972; McNeer, 1983; Moore, 1982a; Pancrazio & Gray, 1982; Secor, 1984; Shakeshaft et al., 1984; Shavlik & Touchton, 1984; Speizer, 1984; Stringer, 1977; White, 1983).

The literature on women in higher education administration contains little information regarding the importance women placed on specific contributors to their career development. Accordingly, this study addresses this lack of empirical findings in the literature as the purpose of this study is to assess the importance of contributors to career development by women employed in educational administration positions in public community colleges and universities in the State of Florida.

### Statement of the Problem

Although contributors to career development in higher education administration for women have been identified, the importance of these contributors has not been determined. Often women are excluded from participation in the political processes of the organization, therefore, discrimination against women has shifted from hiring practices to career development processes (McLane, 1980). Thus, what is the importance of selected contributors to career development for women in higher educational administration?

### Study Questions

This study will be guided by the following questions:

1. What contributors to career development do women in higher education administration rank as important?
2. What is the importance of contributors to career development for women in higher education administration?
3. Does the importance of these contributors differ according to selected demographic characteristics?

### Hypotheses

This study will address the following hypotheses:

1. There is no significant difference ( $p < .05$ ) among the importance of contributors to career development by

administrative level between community college and university women administrators in Florida.

2. There is no significant difference ( $p < .05$ ) among the importance of contributors to career development between community college and university women administrators in Florida.

3. There is no significant difference ( $p < .05$ ) of importance of contributors among selected demographic characteristics.

#### Definition of Terms

1. Contributors--those activities that the literature identifies as assisting in career development. This study will employ the following contributors and they will be discussed in detail in the Review of Literature: mentoring, networking, internships, institutes, committee appointments, special assignments, temporary acting appointments, formal education, resumes, communication skills, and human relations skills.

2. Higher education administration--for purposes of this study, the following categories are considered to be administration: director, chairperson, registrar, officer, assistant/associate dean, dean, assistant/associate vice president, vice president, president, vice provost, provost, vice chancellor, and chancellor.

3. Southern Association of Colleges and Schools (SACS)--an organization formed "with the objective to improve education in the South through the promotion of cooperative efforts among colleges, schools, and related agencies. Among its powers and purposes is to identify for local, regional, national, and international purposes those schools and colleges of acceptable quality to be designated as accredited institutions" (Southern Association of Colleges and Schools, 1985, p. 6).

4. Networking--an informal process that provides access to key decision-makers, sources of information, reinforcement and sponsorship, role model presence, presence of peer support groups, and access to recruitment and informal socialization cultures (Kanter, 1977).

#### Assumption

One assumption is that the importance of the contributors is identified by self-report of the respondents.

#### Limitations of the Study

The study was limited as follows:

1. Since the population studied consisted of women employed in Florida public community colleges and universities, external validity will be limited. Tuckman (1972)



indicated that "a study has external validity if the results obtained would apply in the real world to other similar programs and approaches" (p. 4). Therefore, since a much clearer in-depth picture of Florida women administrators was ascertained, the results can be generalized to other institutions that exhibit like characteristics.

2. The populations studied were limited to the Florida public community colleges in the Division of Community Colleges and the Florida public universities in the State University System.

#### Background and Significance

"...the basic problem with women in administration is that there aren't any women to speak of in administration...devise a program which will have as its end result an increase in the number of women in administration" (McGannon, 1972, p. 2). Frances and Mensel (1981) identified five (5) hypotheses relative to why little progress has been made in placement and salaries of women in higher education administration. These were: (a) women have less time in the position thus making lower salaries, (b) inside hiring again resulting in lower salaries, (c) financial exigency (found not to be an adequate explanation for differences between men's and women's employment and salary status), (d) retrenchment (found little or no relationship between enrollment growth and progress toward affirmative

action goals), and (e) low turnover in senior positions allows little opportunity for hiring women and minorities. Burkhardt (1979) indicated that the underrepresentation of women in decision-making positions is due both to the ideas which women have about themselves and to those that society has imposed upon those doing the hiring.

Specific activities that may contribute to a woman's career development in higher education administration identified in the literature included networking, mentoring, experience, internships, and formal education. Although these activities are represented in the literature as contributing to women's career development in higher education administration, the importance placed on these activities by women is not addressed.

"Women themselves must realize that power is in knowledge" (Baugher & Martin, 1981, p. 83). To gain this "knowledge," thus improving women's representation in higher education leadership, Ernst (1982) offered some suggestions for actions by both the individual and the institution. These suggestions included professional development, special and temporary assignments, internships, rewards for competence and ability, mentoring, self-direction, role models, resume writing, and development of a good old girls network.

Shavlik and Touchton (1984) noted that women are not totally absent from higher education administration, but those who are in prominent positions have relative invisibility as major leaders within and beyond their own campuses and communities. Despite Affirmative Action plans (1968), the number of women in educational administration has declined (Baugher & Martin, 1981; Casey & Stolte, 1981; Krohn, 1974; Levandowski, 1977; McLure & McLure, 1976). Loomis and Wild (1978) stated few women were in positions of leadership in community colleges or in positions above chairperson in higher education. In a study conducted in 1978 by the National Association of State Universities and Land Grant Colleges, there was an overall increase noted of 30.5% in women administrators from 1975 to 1978. The report of this study also indicated that the median number of women administrators at the public universities rose from zero during the 1970-71 academic year to 19 during 1977-78. The study further reinforced findings in 1971 and 1975 studies in that women administrators tended to be more prevalent in the lower rather than the upper administrative ranks (National Association of State Universities and Land Grant Colleges, 1979).

Despite the gains from 1975-78, the study noted that women still held only 5.7% of the top-level and second-line positions. Hittman (1980) stated that the basic

reason for the lack of women in administration stems from social stereotyping perceptions, and not from a lack of committed women.

## REVIEW OF LITERATURE

The literature review relating to women in higher education administration revealed a variety of information. The primary topics addressed were career paths, contributors to career development, barriers to career development women experience, gains in career development women have made, and strategies for career survival. The following review of literature presents a discussion of these topics.

### Career Paths

One issue of particular interest is the career path women take in advancement into higher education administration. Moore (1984) defined the college and university administrative career as "a series of jobs involving tasks of governance and management that tends over time to increased responsibility, reward, and recognition" (p. 9). Moore further indicated that careers are composed of successive or multiple positions in a hierarchy and that one must progress through a hierarchy of jobs before reaching the top position. "The hierarchies in higher education are seldom as rigid as they are in other organizations" (Moore,

p. 10). Moore and Sagaria (1981) identified the following as the standard career path in academe: (a) earn terminal degree, (b) gain professional experience in a discipline, (c) achieve tenure and senior status in a department, and (d) move to chairman, dean, provost. Dr. Anita Harrow, the Provost of Valencia Community College, West Campus, Orlando, Florida, agreed that this does represent a typical career path found in community colleges and universities (personal communication, November 14, 1985). She further stated, however, that often women do not follow the typical career path because they sometimes take a lateral position that appears to offer better advancement opportunities. Moore (1983) and Speizer (1984) noted that faculty experience is a critical career requisite and that the faculty position is the typical entry position for an overwhelming majority of top-line administrative positions. In academic organizations, internal promotion is the exception at higher levels of academic administration and those who mentor are usually preparing leaders for other institutions (Gross & McCann, 1983; McNeer, 1983). Regardless of what the normal routes by which people advance to positions in academic administration are, they must be identified (McGannon, 1972).

"Job-change is widely regarded as the primary means of career advancement for professionals in bureaucratic organizations" (Sagaria & Moore, 1983, p. 353). They further

indicated "...change of jobs approximates vertical mobility....Change in activities represents horizontal mobility" (p. 353). Additionally, they stipulated that men have a higher rate of job-change between institutions than women and that job change is used as a measure of career progress. There is a much higher rate of job change due to promotion for women than for men, therefore, there is a higher rate of job change within an institution for women than men indicating that women administrators tend to build their careers in one institution (Arter, 1973; Frances & Mensel, 1981; Sagaria & Moore). Arter further indicated that women's careers moved at a slower pace than those of men because women did not relocate for advancement. Moore and Sagaria (1979) found that while women were promoted within the institution, they were also willing to move for a promotion to a top-level position. Moore (1982b) found that higher percentages of women have tenure than men. The study further indicated that higher percentages of women than men hold more of their educational degrees and previous positions from the institutions where they are currently employed (Moore, 1982b). Moore (1984) cited from an unpublished dissertation by Marlier that other administrative positions filled with insiders are generally support positions, i.e., dean of student affairs or director of alumni affairs. Sagaria and Moore also determined that

line administrators have more inter-institutional mobility than staff administrators.

### Summary

The typical career path is considered traditional for all types of higher education institutions, colleges, universities and community colleges. Jennings (1979) offered some guidelines for women seeking jobs in higher education administration that can broaden their possibilities. These included: job seeking strategies and suggestions for keeping abreast of professional developments in the field of higher education administration. "An aspiring administrator has to contribute something important to the organization beyond his or her normal job responsibilities, something that may involve risk and increase visibility" (Moore, 1982a, p. 23). Therefore, women should develop career development plans that enable them to consciously work up through the ranks and to develop and strengthen personal characteristics conducive to leadership (Alexander & Scott, 1983).

### Contributors to Career Development

A number of activities considered contributors to career development were discussed in the literature. These contributors were identified as being beneficial to women advancing into higher education administration.



### Mentoring

Kelly (1982) defined mentoring as a situation in which a more experienced and powerful individual guides, advises, and assists in any number of ways the career of a less experienced, often younger, upwardly mobile protégé in the context of a close professionally centered relationship usually lasting one year or more. Bolton (1980), in a definition of a mentor relationship, indicated that there is more of a personal relationship than is found in apprenticeships because the mentor demonstrates how an activity is to be performed and personalizes the modeling influences for the protégé by a direct involvement.

Zaleznik (1977) noted the necessity of the one-on-one mentor relationship in the development of leaders. Personal sponsorship of a mentor is often important to the development of successful women college administrators because without them, women are often excluded from the "old boy" informal structure which provides information and influence necessary for advancement (Ernst, 1982; McNeer, 1983; Moore, 1982a, 1982b; Tickamyer & Bokemeier, 1984; Touchton & Shavlik, 1978).

The opportunity for any individual, male or female, to advance into higher education administration often comes as a result of "who one knows," not totally "what one knows,"

although one's competence is actually what gains the individual recognition by another person. According to Baugher and Martin (1981) the recruitment process will not serve as an effective employment avenue if a woman has not established a male mentor in the informal network who will recommend her.

Roche (1979) stipulated that the first 15 years of an executive's career are considered the learning and growing period and that the majority of women's mentor relationships developed during the 6th to 10th years of their career. McNeer (1983) indicated that one opportunity for mentoring is after the protégé has become a faculty member and is considering a move into administration. Roche noted that "more executives who had a mentor follow a career plan than those who did not" (p. 28) and that "proportionately more female than male executives had protégées" (p. 24). Mentors serve as role models and are usually information brokers in the organization (DeWine, Casbolt & Bentley, 1983; Nelson & Quick, 1985). Bolton (1980) indicated that the influence of role models is important in career development of women as the presence or absence of appropriate models influence the development of the individual. "The skills and learned behaviors appropriate for decision-making positions must be modeled for women by women" (Baugher & Martin, 1981, p. 82). Yet, as they

further indicated, "there is a serious lack of female role models for women in training" (p. 82). However, in the study of 30 women by DeWine, Casbolt, and Bentley, the respondents indicated that male and female mentors were fairly evenly split. Kelly (1982) noted that if the woman takes a proactive approach to the development of a mentor-protégée relationship, she should select a mentor having power and influence and one who is in a top-level position, i.e., dean, provost, president (Ernst, 1982; Moore, 1982a). However, Bolton suggested that the position of an individual in the organizational hierarchy should not be used as an indicator of that individual's ability to serve as a mentor. The key to a mentor's ability to assist the protégé within the network concept revolves around the mentor's influence in the organization and the willingness to recommend an individual for an opportunity. According to Hennig and Jardim (1977a), women have special problems finding suitable mentors which becomes a continuing handicap to them when attempting to advance in the business world. Karr (1983) indicated that women lacked the skill to seek and obtain opportunities to become administrators because women felt that women had less power to make decisions than men and that the "white-male club" promoted men over women to administrative positions. Moore (1982a) indicated "slightly higher percentages of both women and minorities report having been protégées at some point in

their careers. This suggests that a mentor has figured more importantly in the careers of women and minorities" (p. 46). Follon (1983) indicated that female teachers had been most influential in women's career development and that 89% of the study sample agreed having a mentor is helpful to a young woman beginning her career.

Participating in a protégé-mentor relationship carries with it a certain risk. Hennig and Jardim (1977b) indicated that the risk to the mentor is demonstrated if the female protégée fails because her mistakes are often broadcast. Likewise, they indicated that the risk to the woman protégée is demonstrated if the male mentor is unpopular and loses at organization politics, she loses. Hennig and Jardim stipulated that one risk to both the mentor and protégé is the perception of others that a close association will evolve into a sexual entanglement.

#### Networking

Hennig and Jardim (1977b) define the "old boy network" as "a subtle, active system of support which is dependent on friendships, persuasion, favors, promises, and connections with people who already have influence" (p. 79). Networks include access to key decision-makers, sources of positive reinforcement and sponsorship, role model presence, presence of peer support groups, and access

to recruitment and informal socialization cultures (Kanter, 1977).

Kanter (1977) indicated that power and prestige within the organization are determined by access to informal networks and support structures. Moore (1982a) noted that academic administrators are often similarly organized into an old boy network on campus or even across institutions and that minority group members and women may have particular difficulties being selected as protégées because the inner circle is usually an all-male-group with common bonds that does not readily accept persons without the same similarities as other group members. The old boy network was in place and women were not a part of it, thus, women perceived they were exempted from the informal chain of information (Crawford, 1977; McLane, 1981). Additionally, women who were unable to penetrate the boundaries between organizational levels were unable to develop informal and influential relationships necessary for successful power acquisition (Schein, 1978). Therefore, networking was perceived by Willoner Williams (1984) as a major skill that women should develop in preparation for advancement.

The Eastern Regional Conference for Women in Higher Education Administration and the National Identification Program of the American Council on Education have participated in the development of informal networks of

communication among women administrators to facilitate professional development which appear to be working (Capek, 1982; Secor, 1984). Pancrazio and Gray (1982) appear to disagree on the issue of networking for women. They put forth the idea that the male networking model has inadequacies which make it neither psychologically desirable nor professionally useful for women. Therefore, they suggest the concept of the collegial network model. This model is based on affiliation versus competitiveness or individualism. The major component of the model is that of a helping relationship (genuineness, empathy, respect, and concreteness).

#### Internships

The institution can offer programs and experiences to enhance the capabilities of women for advancement. Ernst (1982) suggested: (a) financial support for professional growth opportunities, (b) the development of a climate that acknowledges and rewards ability and competence and is devoid of social bias, and (c) administrative internships. Internships provide the individual the opportunity to demonstrate administrative competence and to experience formal and informal networks (Adkison & Bailey, 1980; Alexander & Scott, 1983; Casey & Stolte, 1981; Ernst). Ernst stipulated that "the internships that provide the

best experience permit the intern to observe and participate in the actual administrative processes of the institution. Hands-on experience is crucial to an effective internship experience" (p. 20).

Adkison and Warren (1980) defined three types of internships: (a) person-centered, role model of "power-shadowing" (placed under recognized administrative leader in field); (b) mission-, office-, or institution-centered (placement in a setting that may be thought of as a subset or specialization within the area of higher education); and (c) function- or process-centered (focuses on a single aspect of administration, i.e., budget). Data in the Andre' and Edwards (1978) study indicated that programs including "internships had considerably higher percentages of people who reported a positive impact on their careers" (p. 18).

McGannon (1972) proposed that institutions could establish cooperative rotating internships in administration with neighboring institutions. Additionally, McGannon indicated that institutions could identify potential women nominees for the Academic Administrative Internship Program.

#### Institutes

Institutes may also be classified as contributors. Those institutes offered by Bryn Mawr College and the

Higher Education Resource Services (HERS) Mid-America (formerly HERS, Mid-Atlantic) and by HERS, New England, at Wellesley College are aimed at improving the status of women in middle and executive levels of higher education administration by providing training in academic governance, finance and budgeting, management and leadership, organizational behavior, administrative uses of the computer, human relations skills, and professional development peculiar to higher education (Secor, 1984; Speizer, 1984). The William H. Donner Foundation, which funded the Summer Institute sponsored by Bryn Mawr College "believed that the inclusion of women in the management of higher education would enrich the leadership of higher education" (Secor, p. 27). Speizer indicated that the Administrative Skills Program sponsored by HERS, New England, was also developed to establish a professional support network among women in the same geographic area.

#### Other Contributors

McGannon (1972) proposed a program that an institution could implement to identify routes for women into administration which included: (a) identification of potential administrative talent, (b) working with fellow administrators in suggesting women candidates for openings, and (c) establishment of a national bank of female administrative



talent. Ernst (1982) offered other suggestions that institutions can use to provide experience that will enhance the capabilities of women being considered for higher administrative positions. One such suggestion was committee appointments which can provide experience specifically in fiscal management, however, women should not allow themselves to be placed on stereotyped committees such as the library committee. A second suggestion by Ernst was to accept special assignments that will provide visibility such as temporary appointment as liaison with the legislature during session, consultant with institutions and agencies outside the institution, liaison with community organizations, and serving on statewide task forces. Ernst also suggested temporary acting appointments for positions in administration. However, it was indicated that this last suggestion could be counter productive if the person in the position desired to apply for it.

Formal education may also be considered a contributor. White (1983) noted that formal training in leadership functions, i.e., planning, organizing, directing, motivating, controlling, and evaluating, is critical for women who historically have had fewer opportunities for advancement in higher education administration. "The educational backgrounds of most college administrators are in areas other than management. Even those with degrees in

educational administration or higher education have had little or no formal training in the techniques of planning, organizing, leading, and evaluating" (Epstein & Wood, 1984, p. 21).

Fletcher (1980) identified some key strategies which contributed to her success and offered them for other women to consider. These included: (a) motivation to achieve goals, (b) careful long-term planning and ability to set priorities, (c) development of decision-making ability, (d) integrity, and (e) being conscientious, reliable, dedicated, competitive, and assertive.

#### Summary

The participation in mentor-protégée relationships by women has been endorsed as a strategy for women overcoming informal barriers to career development and for the retention of women and minorities in higher education administration (Moore, 1982b; Rowe, 1977). One interesting observation made by Hennig and Jardim (1977b) is that "the mentor appears to play a less critical role in organizations where management by objectives (MBO) and career planning are formalized" (p. 60).

The informal network is undoubtedly a contributor to the ability of women to advance into higher education administration and women must develop the networking skill. Informal networks for women have been developed by at least

two professional organizations and these appear to be successful.

Internships provide the individual the opportunity to experience formal and informal networks. They also provide the intern the opportunity to demonstrate administrative competence and to gain hands-on experience.

Institutes have been designed to provide women training in those areas in which they are considered lacking: academic governance, finance and budgeting, management and leadership, organizational behavior, administrative uses of computers, human relations skills, and professional development skills. The institutes have also served to establish a professional network for women.

Women and institutions should take advantage of various other contributors to advancement into higher education administration. Other contributors noted in the literature included institutional financial support for professional development, administrative internships, committee appointments, and temporary acting appointment to positions in administration. Women should accept appointments and assignments in areas in which they have little background or experience, participate in professional development opportunities, be active in the community, and be identified as an institutional representative (Ernst, 1982).

Jackson (1979) indicated that job descriptions must be written in terms of competencies required versus an emphasis on traditional experiences and training. Ernst (1982) suggested that women should develop high quality, accurate, appropriate resumes to enhance capabilities for advancement. Women must take opportunities, both formal and on-the-job, to gain required skills and experiences, i.e., serving in an acting dean position (Jackson). Women must develop self-confidence, communication skills and human relations skills to be successful administrators. Women should not ask to be treated differently than men in pursuing advancement opportunities (A. Harrow, personal communication, November 14, 1985).

#### Barriers to Career Development

Women have advanced into higher education administration in growing numbers. However, many of the same barriers existing in earlier years are still prevalent today. Society has made an effort to alleviate these barriers, but changes, especially those in attitude, occur slowly.

Baughner and Martin (1981) stated "...the decision makers now in authority seem to be the major problem in the issue of underrepresentation of women in administration" (p. 83). The results of a dissertation study by Madsen (1985) indicated a job market that is evidencing stratification by gender, resulting in positional inequality for

women. Therefore, women were found to be disadvantaged in upward organizational mobility, tenure, and academic rank.

Hooyman and Kaplan (1976) defined three categories to describe barriers to high level positions for women. These were: internal (ambivalence on part of women), interpersonal (lack of role models for women administrators), and structural (organizational and informal discrimination--lack of access to male social-informational networks). Structural barriers may be exemplified by the theory of resegregation that included a systematic denial of strategic information rendering the individual powerless (Smith & Dziuban, 1977).

#### Sex Stereotyping

Stereotyping of many occupations has caused women to be viewed as qualified only for those positions stereotyped as female, but not for those stereotyped as male. In the 1978 study, the National Association of State Universities and Land Grant Colleges identified areas in higher education administration by administrative rank in which women were commonly employed. Those areas included: affirmative action, public relations, student affairs, business-fiscal affairs, university relations, continuing education, home economics, nursing, women's programs, cooperative programs, library and learning resource centers, testing and

evaluation centers, registration/admissions, placement, personnel, financial aid, food services, gifts and endowments, institutional research, health-related programs, education, law, business, and fine arts.

Moore (1982b), Casey and Stolte (1981), and Shavlik and Touchton (1984) reconfirmed the findings of the National Association of State Universities and Land Grant Colleges (1978) that one barrier to women advancing in administration relates to being confined to specific fields which are termed traditionally sex-related fields. Moore supports this theory with results of a study of women and minorities in higher education administration in which the sample of senior college administrators, women and minorities generally were registrars, librarians, and financial aid officers. Of those in the study who were deans, women and minorities were largely deans of nursing, home economics, arts and sciences, and continuing education. This theory was again reinforced in a more recent study by Moore (1984) in that "women and minorities seem to be able to build careers in some tracks more easily than in others" (p. 7). Student personnel was one such track while academic affairs had almost no representation from these groups. If women are viewed by peers and others as qualified only for stereotypical positions, they will not be informed of opportunities other than those typically held

by women. "Confinement to a stereotyped role inhibits effective communication" (Baugher & Martin, 1981, p. 81). They further indicated that there has actually been a decline of women in administration and that this may be because of interpersonal and organizational barriers and the sociological stereotyping that creates discriminatory barriers.

The definition of stereotyping also incorporates societal attitudes about the female role. Women are expected to behave like a mother or housewife (Hemming 1982; Loomis & Wild, 1978; Martin-Yancy, DiNitto, & Harrison, 1983). Because of this societal attitude, women traditionally were advised not to seek higher degrees since they will not remain in the paid work force for an uninterrupted time (Kieuit, 1974).

In her book, Men and Women of the Organization, Kanter (1977) wrote that women in peer groups of predominantly women are discouraged from seeking mobility. Therefore, they forego advancement opportunities to maintain friendships. However, Kanter stated that if the peer group is predominantly male, women have no social support to replace lost friends if they are advanced. Kanter further indicated that the social composition of the peer group has an impact on persons in "token" positions. These individuals tend to be more visible and thus feel more pressure to

conform and become "socially invisible." Kanter's theory of organizational behavior addresses women's roles in corporations in terms of structural rather than personality variables. One such structure described by Kanter is that of opportunity in which little chance for future mobility and growth was indicated. Individuals in this position tend to exhibit characteristics stereotyped as "female."

#### Role Conflict

Baughner and Martin (1981), Bowers and Hummel (1979), Hemming (1982), Muhich (1973), and Shavlik and Touchton (1984) indicated that the family role and two-career families can be a barrier to women. Specifically, Muhich demonstrated that single and divorced women hold higher ranking positions than married women. Studies have portrayed women as less independent, less objective, and less logical than men and that the characteristics identified as necessary for leadership are traditionally viewed as male (Baughner & Martin; Uehling, 1973). Our socialization processes perpetuate this myth. However, women who do not believe that they are less independent, less objective, less logical; who do not believe that the dual role (home and profession) is a barrier, have to convince prospective employers of this also (Baughner & Martin).



### Self-Concept

The woman's self-concept plays a key role in the likelihood of advancement into higher education administration. Bowers and Hummel (1979), Cottrell (1978), Hemming (1982), Hooyman and Kaplan (1976), and Shakeshaft et al. (1984) indicated that internal barriers to women's advancement into formal leadership included low career aspirations, self-limiting beliefs and attitudes, lack of motivation, and poor self-image.

### Training/Experience/Role Models

Training and experience were noted by Bowers and Hummel (1979), Ernst (1982), Shavlik and Touchton (1984) and Willoner Williams (1984) as a factor inhibiting advancement. Ernst specifically indicated that women are often considered lacking primarily in budgetary and fund raising experience.

An absence of role models for women administrators is another barrier. Hooyman and Kaplan (1976) and Shavlik and Touchton (1984) identified this issue as an external barrier.

### Recruitment/Hiring Practices

Despite Affirmative Action plans (1968), institutional recruitment and hiring practices continue to inhibit the advancement of women into higher education administration.

According to Baugher and Martin (1981), Casey and Stolte (1981), and Willoner Williams (1984), organizational factors included such issues as institutional patterns, rules, admissions and recruitment practices, hiring practices, job requirements and the formal communication network. Although recruitment practices are more open to a broad range of applicants, Casey and Stolte stated that the tendency is for employers to seek recommendations from colleagues. Therefore, if a woman has not established a male mentor in the informal network who will recommend her, the recruitment process probably will not serve as an effective employment avenue (Baugher & Martin). Estler (1977) identified three screening factors that filter out disproportionate numbers of women from promotion to higher positions: competence, compatability, and mentor-protégé relationship. In interviews with school administrators and candidates for administrative positions, Schmuck (1975b) showed how attitudes that reflected lower expectations, sexual fears, and other stereotyped notions toward women were integrated into the hiring process.

#### Summary

In summary, women are confronted with barriers to advancement into higher education administration. The literature reflected these barriers as including stereotyping of occupations, role conflict (the professional role versus

the family role), two-career families, insufficient training and experience, absence of role models, and non-inclusion in informal networks.

It appears that significant identification of the barriers to women advancing into higher education administration has been accomplished.

#### Gains in Career Development

Moore (1982b) noted that despite affirmative action, women and minorities remain underrepresented in college and university administrations and that "without significant interest and assistance by fair-minded white male administrators little can or will change to benefit the inclusion of more women and minorities" (p. 49).

Moore (1982b) noted that public institutions show consistently smaller percentages of women among their administrative and faculty bodies. Hemming (1982) cited a 1980 study conducted by the American Council on Education that showed an increase of 38% in women serving as Chief Executive Officers (CEOs) in American colleges and universities during the preceding five years. That study also showed that the largest growth occurred in four-year public colleges showing a 180% increase and two-year public colleges showing the number of women of CEOs tripled. "The greatest opportunities for administrative careers for women

and minorities appear to remain in colleges and universities specifically designed to serve them: namely women's colleges and predominately Black institutions" (Moore, p. 45). Follon (1983) showed that slightly more than 21% of the administrators at state and land-grant universities are women. Epstein and Wood (1984) cited a recent study by the American Council on Educational Office of Women in Higher Education that indicated the number of women chief officers has more than doubled since 1975, however, this only represents 8% of community college CEOs. Moore (1984) indicated that the American Council on Education reported a ten-year gain of more than a hundred women presidents, yet Green (1984) stated that "women and minorities are making only minor gains in moving into major administrative positions on campus" (p. 46). Epstein and Wood stated "the importance and visibility of community colleges within their service areas place them in an excellent position to set an example for other organizations, public and private, to follow" (p. 19).

Andre' and Edwards (1978), indicated that 36% of the respondents to a questionnaire reported a wide range of positive changes in career as a result of the training program each participated in--some changes resulting in significant improvements in salary and position. Ninety-three percent of the respondents rated sharing the training

experience with other women as very useful or somewhat useful. However, when asked if such training programs should be designed specifically for women, 24% indicated they thought not. One point of interest made by one respondent in the Andre' and Edwards study was "...identifying a program for women is strategically unwise, stigmatizing the participant and thus adding to the handicaps women already have" (p. 20). It was also reported that 34% of the respondents indicated no change in career as a result of the training and cited traditional barriers: (a) college not willing to share top positions with women, (b) told it would be impossible to advance, and (c) stereotyped as an affirmative action person.

#### Changes in the System

Although gains have been made in the advancement of women into higher education administration, there are still minimal numbers, therefore, "changes" in the system must occur.

Individual behavior and organizational structure are interrelated and systematic change is an appealing strategy for improving women's participation in educational administration (Adkison & Bailey, 1980; Katz & Kahn, 1966). Weick (1976) described loosely coupled systems as being composed of schools that are autonomous, geographically dispersed units, therefore, change to one part of the system may have

little or no effect on other parts. It may be surmised that a community college system and a state university system may be defined as loosely coupled systems and efforts at one institution in the system to advance women in higher education administration may have little effect on other institutions in the same system. Adkison and Bailey indicated one approach to systematic change in a loosely coupled system is to treat the process of change as the diffusion of innovation across systems, innovation being "hiring women in line administrative positions" (p. 143). They further stipulated that the change theory of Katz and Kahn "suggests that those who would change women's role in education should intervene by manipulating organizational variables" (p. 142). Kanter (1977) indicated that changes in individuals will not result in organizational change, therefore, change must address opportunity, power, and tokenism. Kanter further suggested organizational changes ranging from decentralization to hiring groups of minority categories versus individuals and developing a women's network. Rosenbaum (1975) developed the efficiency motivation model of job-change which serves two possible conflicting functions: (a) it serves an organization's need to select and advance persons to perform necessary tasks, and (b) it serves as an employee motivator.

### Summary

Although gains have been experienced by women advancing into higher education administration, women and minorities remain underrepresented. For this trend to reverse, change must occur in societal attitudes because as Hittman (1980) stated, the basic reason for the lack of women in administration stems from social stereotyping perceptions.

### Strategies for Survival

Once women are in higher education administrative positions the next step is to survive. Various strategies for survival for women have been identified and included: (a) Affirmative Action plans (1968), (b) delegation of decision-making responsibility, (c) establishment of networks with other women administrators, (d) participation in assertiveness training, (e) participation in professional organizations, (f) evaluation of one's own administrative practices and skills, (g) improvement of supervisory attitudes and skills, (h) promotion of activities designed to increase women's professional opportunities, (i) continuing professional development, (j) determining positions women qualify for and identifying additional training that might assure success in moving up, and (k) providing women equal opportunities for receiving financial aid, assistanceships, and internships, to assist in

furthering their educations (Burkhardt, 1979; Jennings, 1979). Hemming (1982) indicated women in higher education administration in California community colleges value interpersonal skills more highly than any other personal characteristic for success.

Burkhardt (1979) indicated that if a woman feels she is a "token" administrator because of affirmative action, she should seek a high level of visibility and that one way to do this is to assume added responsibility especially if it will provide opportunity to come in contact with an important decision-maker who may otherwise be inaccessible. Women in leadership positions should seek out other women who have administrative potential and encourage them to develop it, thus serving as a mentor to other women (Burkhardt; Jennings, 1979; Nelson & Quick, 1985). Jennings also identified one other advocacy activity that female administrators should provide for others interested in obtaining similar positions: compilation of information on administrative careers in higher education.

#### Chapter Summary

There have been a number of strategies for survival defined for women in administrative positions. Categorically, these included: (a) Affirmative Action plans (1968), (b) evaluation and development of one's administrative practices and skills, (c) participation in



professional organizations, (d) promotion of activities designed to increase women's professional opportunities, and (e) providing a network to assist other women in identifying and preparing for leadership positions.

The literature substantially defines the barriers to women desiring advancement into higher education administration. Among the barriers confronting women are stereotyping of occupations, role conflict (the professional role versus the family role), two-career families, and non-inclusion in an informal network.

The literature also addresses various activities that may be termed contributors because they contribute to or enhance the ability of women to advance into higher education administration.

First of all, women should develop career plans that enable them to consciously work up through the ranks (Alexander & Scott, 1983). These plans should also include opportunities to develop and strengthen those personal characteristics conducive to leadership, such as communication skills and human relations skills.

Various contributors are viewed as providing women opportunities to be visible and to demonstrate their leadership abilities. Contributors such as mentor-protégé relationships, informal networks, serving on committees which are not stereotyped, serving in an acting capacity in an

administrative position, and participating in institutes and/or administrative internships provide the opportunity for visibility.

Formal education must not be overlooked as a contributor to the advancement of women into higher education administration. Since women have been viewed as lacking in specific areas such as budgeting and fund raising, women must begin bridging this gap through formal education. However, education alone is not sufficient to prepare women in these areas. Experience is a significant complement to formal education.

Specific advice was offered by Hemming (1982) and Fletcher (1980) to other women aspiring to move into administration: (a) work hard, (b) be politically aware and able to play "the game," (c) be well prepared academically and experientially for issues which arise, (d) establish definite career goals and objectives to work toward, (e) develop a positive attitude and maintain a sense of humor, (f) take initiative, (g) respect the experience of others, (h) use role models, (i) reserve time for relaxation, recreation, and diversion, and (j) strive to be non-emotional.

Although the barriers and contributors to women's advancement into higher education administration have been identified through research, the literature does not

reflect the importance women place on the various contributors. Therefore, this study will attempt to address this gap in the literature.

## DATA PRESENTATION AND ANALYSIS

In order to conduct the present study, it was necessary to define the population, determine the methods of data collection, design the instrument, and define analysis procedures.

The method of data collection was through the use of a written questionnaire. The types of data collected were primarily descriptive.

### Population

The population for this study consisted of women administrators. The population more specifically consisted of those women currently employed in public community colleges and universities in Florida (see Appendix A) accredited by the Southern Association of Colleges and Schools (1985).

Those positions that were used to identify higher education administration positions were: director, chairperson, registrar, officer, assistant dean, associate dean, dean, assistant vice president, associate vice president, vice president, vice provost, provost, president, vice chancellor, chancellor, and "assistant to" for any of these

positions. The relative position to the chief executive officer/president determined the administrative level which was to be the basis for some analysis.

A list of women administrators in each of the community colleges and universities was secured from a representative of the Florida Chapter of the American Council on Education National Identification Program. A cover letter and the appropriate list was sent to the Affirmative Action officer of each institution for updating (Appendix B). The total population was 668 with 379 (57%) employed in administrative positions in the community colleges and 289 (43%) in administrative positions in the universities.

#### Development of Instrument

The survey instrument was designed to specifically relate to the data required for the problems described. The instrument consisted of four sections: (a) Current Position, (b) Contributors, (c) Previous Experience, and (d) Personal Characteristics (see Appendix C).

Items were initially identified through the literature review. Further items were identified through the review of questionnaires developed by McGee (1979) and Kelly (1982). Additional items were identified through interviews of leading women administrators.

The current position section provided information relative to the importance of gender in achieving the current position. Information from this section also related to the type of institution and the relative position of the current position in the administrative hierarchy.

The contributors section provided information relative to the importance women placed on the various contributors to their career development.

Section III, Previous Experience, related information on the individual's career development. Section IV provided various demographic statistics about the participants in the study.

#### Pilot Study

The questionnaire was pilot tested using women in higher education administrative positions at state supported community colleges and universities outside the State of Florida. The questionnaire was also administered to two graduate research classes. The purposes of these pilot studies were to establish face and content validity; to improve the grammar, format, and clarity; to determine the amount of time needed to complete the questionnaire; and to add or delete items considered necessary or unnecessary. The pilot study groups were also asked to

critique its domain representativeness and comprehensiveness. Therefore, it was assumed that it has face validity as defined by Anastasi (1954).

'Face validity' refers, not to what the test necessarily measures, but to what it appears to measure....Does it seem to be relevant to its objectives, when reviewed by the subjects who take it, the administrators who adopt it, or anyone else who might judge it? (p. 12)

Although there were men in the two research classes, the comments relating to content and format were very beneficial to the final questionnaire. The women in these classes were in administrative positions in both K-12 and higher education. These groups (similar to the population) were chosen versus using a portion of the population because of the small size of the population.

From the feedback in the pilot studies and review by dissertation committee members, some items were clarified, deleted and added. The final draft was approved by the dissertation committee chairperson. It was then printed for ease of mailing, completion, return, data entry, and analysis.

#### Collection of Data

Data for the study were collected through the use of a questionnaire initially mailed to 524 women selected from a blind list. The sample consisted of 301 (57.5%) and 223 (42.5%) in community colleges and universities,

respectively. The names, addresses, and identification (ID) numbers were entered into a mailing label database (Pringle, 1986) on an IBM-PC. Through the interactive nature of the mailing label database and dBase III (1984), the database column used to generate a mailing label was displayed on the screen. No name or other identifying information was displayed. The column was randomly marked with a "y" to generate a label. The ID numbers consisted of a letter prefix "C" for community college and "U" for university, plus a sequentially assigned number. The labels and corresponding ID numbers were affixed to the questionnaires for mailing. The ID numbers were used to identify non-respondents and to generate a second mailing. A 58.8% (308) return rate was accomplished from the initial mailing.

An additional 40 (7.6%) questionnaires were returned as a result of the second mailing. After deleting those not useable, there was an overall return rate of 65.5%. Three weeks after the second mailing of questionnaires, acceptance of responses was terminated.

Prior to the mailing of the questionnaires to the sample, a separate cover letter and copy of the questionnaire was mailed to the president/provost of each community college and university (see Appendix D). This was performed as a courtesy to appraise them of the study.



### Data Analysis Procedures

The questionnaire responses were analyzed to determine the demographic characteristics, administrative level of employment in higher education, employment institution type, and the importance women place on various contributors to career development.

The statistical procedures used were programs included in the Statistical Package for Social Sciences (SPSS<sup>X</sup>) (SPSS, Inc., 1986). Descriptive statistical techniques, frequency distributions, crosstabulations, and oneway analysis of variance (ANOVA) were used to analyze the data. Chi-square was utilized to test for significant difference.

## ANALYSIS OF THE DATA

### Introduction

The analysis of data is presented in this section. Descriptive statistical analysis using frequency distributions and histograms were conducted to address study questions One and Two. A crosstabulation with all statistics options was utilized to address Study Question Three and hypotheses One and Three. Crosstabulations and oneway analysis of variance (ANOVA) were utilized to address Hypothesis Two.

Table 1 in Appendix E includes various items from the questionnaire (see Appendix C) in abbreviated form. These abbreviated versions will be used in all tables following the introduction.

### Sample and Response Characteristics

This section includes a discussion of the sample characteristics and questionnaire response rates. Table 2 is a summary of the mailing and response rates for the questionnaire compared to the population and sample.

The total population consisted of 668 women administrators in public institutions of higher education in Florida. Of the 668, 289 (43%) women were employed in

TABLE 2  
QUESTIONNAIRE MAILING AND  
RESPONSE RATES

Category	N	Percentage of Population	Percentage Response Rate
Population	668	100.0	
University	289	43.0	
Community College	379	57.0	
Total Questionnaires Sent (1st Mailing)	524	78.4	
Total Questionnaires Returned (1st Mailing)	308	46.1	58.8
Total Questionnaires Sent (2nd Mailing)	266	39.8	
Total Questionnaires Returned (2nd Mailing)	40	6.0	7.6
Total Questionnaires Returned (1st & 2nd Mailing)	348	52.1	66.4
Useable Questionnaires (1st & 2nd Mailing)	343	51.3	65.5
Questionnaires Sent to University Sample	223	77.2	
Questionnaires Sent to Community College Sample	301	79.4	

TABLE 2 (continued)

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Category	N	Percentage of Population	Percentage Response Rate
University Sample Returned (1st & 2nd Mailing)	149	51.6	66.8
Community College Sample Returned (1st & 2nd Mailing)	194	51.2	64.5

---

universities and 379 (57%) were employed in community colleges. Initially, there were 524 questionnaires mailed representing 78.4% of the total population. The distribution of the questionnaires included 223 (77.2%) women in universities and 301 (79.4%) women in community colleges. A return of 348 completed questionnaires yielded a total response rate of 66.4% and a 52.1% sampling of the population. There were 343 useable questionnaires in those returned for a 65.5% response rate representing 51.3% sample of the total population.

A further description of the sample using response percentages for selected demographic and other informational items is included as Table 3 in Appendix F.

#### Identification and Importance of Contributors to Career Development

The analysis of responses for study questions One and Two are discussed in this section. Data for both questions were analyzed using frequency distributions and histograms for all respondents. The study questions addressed are:

Study Question One: What contributors to career development do women in higher education administration rank as important?

Study Question Two: What is the importance of contributors to career development for women in higher education administration?

On the questionnaire, respondents were asked to rank each contributing factor using a Likert Scale with points ranging from not applicable (0) through very important (5). Table 4 presents those responses for relative importance of each contributing factor to the respondents' career development.

Table 5 summarizes the contributing factors in terms of cumulative response percentages for "unimportant" and "important." The table also has entries for responses indicating the contributing factor was not applicable and neither important nor unimportant.

Based on frequency distributions the factors considered important by an appreciable percentage of respondents to their career development were: formal education, influence of a mentor, willingness to accept added responsibility, timing, personnel administration skills, and communication skills. Those factors demonstrating a very high positive response rate in descending order were: formal education (95.9%), communication skills (94.4%), willingness to accept added responsibility (91.4%), personnel administration skills (82.0%), and timing (80.1%).

Of interest also were those contributing factors that respondents did not consider applicable to their career development. Reviewing Table 5 revealed that participation

TABLE 4  
 IMPORTANCE OF CONTRIBUTING FACTORS  
 ACTUAL RESPONSES\*

Contributor	N/A		Very Unimpt		Unimpt		Neither Impt Nor Unimpt		Important		Very Important	
	N	%	N	%	N	%	N	%	N	%	N	%
<b>Formal Education</b>	1	0.3	2	0.6	2	0.6	9	2.6	63	18.5	263	77.4
<b>Affirm Action</b>	56	16.6	54	16.0	41	12.2	91	27.0	62	18.4	33	9.8
<b>Chance</b>	72	21.6	60	18.0	48	14.4	76	22.8	55	16.5	23	6.9
<b>Mentor</b>	48	14.5	32	9.6	21	6.3	66	19.9	118	35.5	47	14.2
<b>Internship</b>	156	46.8	51	15.3	24	7.2	51	15.3	36	10.8	15	4.5
<b>Member</b>	51	15.0	80	23.6	37	10.9	74	21.8	80	23.6	17	5.0
<b>Leader</b>	41	12.1	70	20.6	34	10.0	74	21.8	86	25.4	34	10.0
<b>Responsibility</b>	8	2.4	5	1.5	4	1.2	12	3.5	99	29.2	211	62.2

TABLE 4 (continued)

Contributor	N/A		Very Unimpt		Unimpt		Neither Impt Nor Unimpt		Important		Very Important	
	N	%	N	%	N	%	N	%	N	%	N	%
<b>Interim</b>	95	28.4	30	9.0	15	4.5	39	11.2	82	24.6	73	21.9
<b>Relocate</b>	169	50.3	32	9.5	9	2.7	44	13.1	29	8.6	53	15.8
<b>Resume</b>	56	16.8	29	8.7	15	4.5	52	15.6	119	35.6	63	18.9
<b>Timing</b>	19	5.6	7	2.1	11	3.3	30	8.9	138	40.9	132	39.2
<b>Committees</b>	74	22.1	41	12.2	23	6.9	71	21.2	104	31.0	22	6.6
<b>Research</b>	111	33.0	53	15.8	35	10.4	75	22.3	39	11.6	23	6.8
<b>Publications</b>	105	31.5	55	16.5	32	9.6	76	22.8	41	12.3	24	7.2
<b>Personnel</b>	14	4.1	9	2.7	11	3.2	27	8.0	140	41.3	138	40.7
<b>Counseling</b>	32	9.5	17	5.0	19	5.6	68	20.1	124	36.7	78	23.1
<b>Communication</b>	4	1.2	1	0.3	5	1.5	9	2.6	114	33.4	208	61.0



TABLE 4 (continued)

Contributor	N/A		Very Unimpt		Unimpt		Neither Impt Nor Unimpt		Important		Very Important	
	N	%	N	%	N	%	N	%	N	%	N	%
<b>Community Relations</b>	22	6.5	18	5.3	27	7.9	60	17.6	118	34.7	95	27.9
<b>Admin Exp</b>	23	6.8	17	5.0	16	4.7	41	12.2	107	31.8	133	39.5
<b>Teaching Exp</b>	68	20.4	28	8.4	21	6.3	59	17.7	104	31.1	54	16.2
<b>Admin/Teach Exp</b>	61	18.4	22	6.6	21	6.3	52	15.7	95	28.6	81	24.4
<b>Inf Female Network</b>	97	29.0	52	15.6	23	6.9	64	19.2	76	22.9	22	6.6
<b>Inf Male Network</b>	103	31.5	56	17.1	19	5.8	62	19.0	60	18.3	27	8.3

TABLE 4 (continued)

Contributor	N/A		Very Unimpt		Unimpt		Neither Impt Nor Unimpt		Important		Very Important	
	N	%	N	%	N	%	N	%	N	%	N	%
<b>For Female Network</b>	129	38.9	67	20.2	30	9.0	69	20.8	29	8.7	8	2.4
<b>For Male Network</b>	131	39.7	64	19.4	25	7.6	66	20.0	30	9.1	14	4.2

\*Percentages Rounded

TABLE 5  
 IMPORTANCE OF CONTRIBUTING FACTORS  
 SUMMARY DATA\*

Contributor	N/A		Unimpt		Neither Impt Nor Unimpt		Important	
	N	%	N	%	N	%	N	%
<b>Formal Education</b>	1	0.3	3	1.2	9	2.6	326	95.9
<b>Affirm Action</b>	56	16.6	95	28.2	91	27.0	95	28.2
<b>Chance</b>	72	21.6	108	32.4	76	22.8	78	23.4
<b>Mentor</b>	48	14.4	53	15.9	66	19.9	165	49.7
<b>Internship</b>	156	46.8	75	22.5	51	15.3	51	15.3
<b>Member</b>	51	15.0	117	34.5	74	21.8	97	28.6
<b>Leader</b>	41	12.1	104	30.6	74	21.8	120	35.4

TABLE 5 (continued)

Contributor	N/A		Unimpt		Neither Impt Nor Unimpt		Important	
	N	%	N	%	N	%	N	%
<b>Responsi- bility</b>	8	2.4	9	2.7	12	3.5	310	91.4
<b>Interim</b>	95	28.4	45	13.5	39	11.2	155	46.5
<b>Relocate</b>	169	50.3	41	12.2	44	13.1	82	24.4
<b>Resume</b>	56	16.8	44	13.2	52	15.6	182	54.5
<b>Timing</b>	19	5.6	18	5.4	30	8.9	270	80.1
<b>Committees</b>	74	22.1	64	19.1	71	21.1	126	37.6
<b>Research</b>	111	33.0	88	26.2	75	22.3	62	18.4
<b>Publica- tions</b>	105	31.5	87	26.1	76	22.8	65	19.5
<b>Personnel</b>	14	4.1	20	5.9	27	8.0	278	82.0
<b>Counseling</b>	32	9.5	36	10.6	68	20.1	202	59.8

TABLE 5 (continued)

Contributor	N/A		Unimpt		Neither Impt Nor Unimpt		Important	
	N	%	N	%	N	%	N	%
Communica- tion	4	1.2	6	1.8	9	2.6	322	94.4
Community Relations	22	6.5	45	13.2	60	17.6	213	62.6
Admin Exp	23	6.8	33	9.7	41	12.2	240	71.3
Teaching Exp	68	20.4	49	14.7	59	17.7	158	47.3
Admin/ Teach Exp	61	18.4	43	12.9	52	15.7	176	53.0
Inf Female Network	97	29.0	75	22.5	64	19.2	98	29.4
Inf Male Network	103	31.5	75	22.9	62	19.0	87	26.6

TABLE 5 (continued)

Contributor	N/A		Unimpt		Neither Impt Nor Unimpt		Important	
	N	%	N	%	N	%	N	%
<b>For Female Network</b>	129	38.9	97	29.2	69	20.8	37	11.1
<b>For Male Network</b>	131	39.7	89	27.0	66	20.0	44	13.3

\*Percentages Rounded

in a formal internship (46.8%) and willingness to relocate (50.3%) were considered not applicable by an appreciable number of respondents.

The remaining contributors had a distribution of responses that did not reflect substantially strong indications by the respondents regarding relative importance, neutrality, or unimportance.

The respondents were given the opportunity to list any factors not on the questionnaire they felt had contributed to their career development. The additional factors listed were: availability for travel, willingness to take risk, professional accreditation, budget constraints, knowledge of policies and procedures, availability for excess work time, ability to formulate goals, expertise in field, knowledge of fiscal operations, political knowledge, ability to evaluate how organization functions, dedication to career progression plan, power base, ability to work successfully with men, and school from which doctorate received.

#### Analysis of Contributing Factors by Institution Type

This section addresses hypotheses One and Two with regard to the importance of contributors by employment institution type.

Hypothesis One: There is no significant difference ( $p < .05$ ) among the importance of contributors to career development by administrative level between community college and university women administrators in Florida.

Hypothesis Two: There is no significant difference ( $p < .05$ ) among the importance of contributors to career development between community college and university women administrators in Florida.

The information for the analysis relative to Hypothesis One was drawn from a crosstabulations analysis. To address Hypothesis Two, the data were subjected to a one-way ANOVA and a crosstabulations analysis. For the oneway ANOVA, the Likert scale points for Very Unimportant, Unimportant, Important, and Very Important were not collapsed as they were for the crosstabulation analysis.

#### Analysis by Level by Institution Type

The administrative levels identified by the respondents ranged from level 1 to level 7. Although the term administrative level is utilized it is not meant to imply a line or staff position. It is used merely to refer to the level in the organizational hierarchy at which a respondent is located relative to the president (level 1).



### Factors With Significant Difference

An analysis of tables 6-31 presented in Appendix G revealed a number of factors that demonstrated a relationship between how community college and university women on various administrative levels viewed those factors in terms of importance. In reviewing the tables, level 1 is the president and level 7 is the lowest level.

Of the respondents on level 6 who considered prior teaching experience to be not applicable, 100.0% were employed in universities. Of those on level 6 who considered prior teaching experience important to career development, 100.0% were employed in community colleges. Prior teaching experience was specified as neither important nor unimportant to 100.0% of the respondents on level 6 and they were employed in community colleges.

The only factor demonstrating a significant difference to respondents on level 5 was chance. Of those who indicated it was important, 100.0% were employed in universities. Of the respondents who considered chance to be neither important nor unimportant, 71.4% were employed in universities. Chance was also considered unimportant to career development and 63.6% of these respondents were employed in community colleges.

There was a significant difference at level 4 for participation in a formal internship and prior administrative experience. Of the respondents who considered

participation in a formal internship important, 65.2% were employed in universities. Of those who indicated this factor neutral and not applicable, 72.2% and 65.3%, respectively, were employed in community colleges. Seventy percent of the respondents who viewed prior administrative experience as not applicable were employed in community colleges. Of those who viewed it as neutral to career development, 85.7% were employed in community colleges.

On level 3, those respondents who indicated that committee appointments were important, 66.0% were employed in community colleges. Committee appointments were also considered not applicable by respondents on level 3. Of these, 75.0% were employed in community colleges.

The informal male network was stipulated as neither important nor unimportant and as not applicable by respondents on level 2. Of those who viewed it as neutral, 87.5% were community college employees. Eighty percent of those who considered the informal male network as not applicable were also employed in community colleges.

#### Factors Without Significant Difference

Further analysis of tables 6-31 in Appendix G was conducted in terms of those factors which demonstrated no difference between the view taken of the various contributing factors by community college and university women administrators based on their administrative level.

All respondents at level 7 considered influence of a mentor, willingness to accept added responsibility, resume, and community relations important to their career development.

Those factors considered by respondents on level 7 to be not applicable were membership in professional organization(s) and committee appointments.

The respondents on level 7 identified the informal male network as neither important nor unimportant to their development. The remaining factors demonstrated an even distribution across the response categories for level 7.

Formal education, chance, influence of a mentor, resume, interim assignments, timing, willingness to accept added responsibility, personnel administration, counseling skills, community relations, prior administrative and teaching experience, and communication skills were specified as important by community college and university women administrators at level 6.

An appreciable number of respondents at level 6 considered willingness to relocate as not applicable to their career development. At level 6 all other factors demonstrated an even distribution of responses over all response categories.

University and community college level 5 respondents considered formal education, resume, timing, personnel administration, counseling experience, willingness to

accept added responsibility, communication skills, community relations, and prior administrative and teaching experience as important. The responses for the remainder of the factors were evenly distributed across the response categories.

Both the community college and university respondents at level 4 indicated an importance for formal education, willingness to accept added responsibility, resume, timing, personnel administration skills, counseling skills, communication skills, community relations, and prior administrative and teaching experience.

A considerable number of administrative level 4 respondents identified willingness to relocate as not applicable to their career development. There was an even distribution of responses across all response categories for the remainder of the factors at level 4.

The respondents at level 3 considered formal education, influence of a mentor, willingness to accept added responsibility, resume, timing, personnel administration skills, counseling, community relations, prior administrative and teaching experience, and communication skills as important to their career development.

Those factors that were stipulated by a considerable number of respondents on level 3 as being not applicable were participation in a formal administrative internship and willingness to relocate. All other factors experienced

an even distribution of responses across all response categories at level 3.

Level 2 respondents specified that formal education, influence of a mentor, timing, committee appointments, willingness to accept added responsibility, leadership in professional organization(s), interim assignments, personnel administration, counseling skills, community relations, prior administrative and teaching experience, resume, and communication skills were important.

An appreciable number of respondents on administrative level 2 identified the following factors as being not applicable to their career development participation in a formal administrative internship and willingness to relocate. At level 2 the remainder of the factors demonstrated an even distribution of responses across all response categories.

University and community college respondents at level 1 expressed a consideration of importance for formal education, influence of a mentor, leadership in professional organization(s), willingness to accept added responsibility, interim assignments, resume, willingness to relocate, timing, personnel administration, committee appointments, communication skills, community relations, prior administrative and teaching experience, and the formal and informal female and male networks.

The number of respondents at level 1 was so small (two community colleges and one university) that analysis to identify those factors with the highest response rates was inhibited. Therefore, a 100% response rate was considered indicative of a strong view of the relative importance of any factor and 66.7% was considered a moderately strong view. Those factors which demonstrated a 100% response rate at level 1 for the important response category were formal education, influence of a mentor, willingness to accept added responsibility, willingness to relocate, resume, timing, personnel administration skills, communication skills, community relations, prior administrative and teaching experience, and the informal male network.

The factors that demonstrated at least a 66.7% response rate for the unimportant response category were Affirmative Action plan, chance, research, and counseling skills.

At least a 66.7% response rate for the not applicable category was demonstrated by participation in a formal administrative internship. The responses for the remainder of the factors were evenly distributed over all response categories.

### Summary

Of the factors that demonstrated a relationship between the responses by institution type according to

administrative level, the following were considered important to career development:

1. prior teaching experience--community college level 6
2. chance--university level 5
3. participation in a formal administrative internship--university level 4
4. committee appointments--community college level 3

Those factors that were considered neither important nor unimportant were:

1. prior teaching experience--community college level 6
2. chance--university level 5
3. participation in a formal administrative internship--community college level 4
4. prior administrative experience--community college level 4
5. informal male network--community college level 2

Of the contributing factors for which there was a significant difference, chance at community college level 5 was considered unimportant to career development.

From a summary of those factors demonstrating a significant difference, the following were stipulated as being not applicable:

1. prior teaching experience--university level 6
2. participation in a formal administrative internship--community college level 4
3. prior administrative experience--community college level 4
4. committee appointments--community college level 3
5. informal male network--community college level 2

Summarizing those factors for which there was no significant difference in the responses according to administrative level by institution type, the following were considered important by the respondents on at least four of

the seven administrative levels; education, influence of mentor, willingness to accept added responsibility, resume, timing, personnel administration skills, communication skills, community relations, prior administrative and teaching experience, and counseling skills.

The informal male network was considered to be neither important nor unimportant by respondents on only one of the seven administrative levels, level 2.

Those factors indicated as unimportant on only one of the seven levels, level 1 were Affirmative Action plans, chance, research, and counseling skills.

Participation in a formal administrative internship was considered not applicable by an appreciable number of the respondents on three of the seven levels. Willingness to relocate was considered not applicable by those on four of the seven administrative levels. Membership in professional organization(s) and committee appointments were considered not applicable at one of the seven levels only, level 7.

The response distribution for all remaining factors was evenly distributed across the response categories.

#### Analysis by Institution Type

Review of the oneway ANOVA information presented in Table 32 revealed that only willingness to relocate and research demonstrated a significance level less than .05



TABLE 32  
FACTORS BY INSTITUTION TYPE  
SUMMARY DATA\*

Factor	Institution	Mean	Standard Deviation	Significance
<b>Formal Education</b>	Com Col	4.75	0.53	0.24
	Univ	4.68	0.68	
<b>Affirm Action</b>	Com Col	2.87	1.27	0.42
	Univ	2.99	1.26	
<b>Chance</b>	Com Col	2.69	1.31	0.48
	Univ	2.80	1.21	
<b>Mentor</b>	Com Col	3.41	1.11	0.56
	Univ	3.49	1.28	
<b>Internship</b>	Com Col	2.67	1.27	0.95
	Univ	2.65	1.38	
<b>Member</b>	Com Col	2.77	1.26	0.40
	Univ	2.64	1.34	
<b>Leader</b>	Com Col	2.97	1.29	0.62
	Univ	2.89	1.42	
<b>Responsi- bility</b>	Com Col	4.53	0.76	0.90
	Univ	4.54	0.76	
<b>Interim</b>	Com Col	3.70	1.27	0.44
	Univ	3.57	1.37	
<b>Relocate</b>	Com Col	3.63	1.31	0.01
	Univ	3.07	1.58	
<b>Resume</b>	Com Col	3.63	1.14	0.81
	Univ	3.60	1.26	
<b>Timing</b>	Com Col	4.24	0.90	0.21
	Univ	4.11	0.91	

TABLE 32 (continued)

Factor	Institution	Mean	Standard Deviation	Significance
<b>Committees</b>	Com Col	3.24	1.19	0.28
	Univ	3.08	1.21	
<b>Research</b>	Com Col	2.55	1.18	0.01
	Univ	2.98	1.35	
<b>Publications</b>	Com Col	2.61	1.20	0.06
	Univ	2.93	1.36	
<b>Personnel</b>	Com Col	4.19	0.84	0.93
	Univ	4.19	1.03	
<b>Counseling</b>	Com Col	3.77	1.03	0.60
	Univ	3.70	1.14	
<b>Communication</b>	Com Col	4.58	0.59	0.45
	Univ	4.52	0.73	
<b>Community Relations</b>	Com Col	3.85	1.06	0.17
	Univ	3.67	1.22	
<b>Admin Exp</b>	Com Col	3.96	1.13	0.23
	Univ	4.11	1.10	
<b>Teaching Exp</b>	Com Col	3.54	1.20	0.58
	Univ	3.46	1.22	
<b>Admin/ Teach Exp</b>	Com Col	3.68	1.26	0.70
	Univ	3.74	1.13	
<b>Inf Female Network</b>	Com Col	3.01	1.27	0.63
	Univ	2.93	1.32	
<b>Inf Male Network</b>	Com Col	3.03	1.28	0.24
	Univ	2.81	1.44	
<b>For Female Network</b>	Com Col	2.48	1.17	0.43
	Univ	2.34	1.23	
<b>For Male Network</b>	Com Col	2.60	1.24	0.39
	Univ	2.44	1.32	

\*Percentages Rounded

indicating that there is a relationship between how women in community colleges and universities viewed these factors. Further analysis of these factors indicated that willingness to relocate was considered more important by community college women administrators than by university women administrators. However, research was considered more important to those employed in universities. Based on the oneway ANOVA, there was no difference between the importance placed on the remainder of the factors by community college and university women administrators.

Table 33 presents the crosstabulation analyses of these data. A review for significance ( $p < .05$ ) revealed that willingness to relocate (0.02%), research (0.01%) and publications (0.004%) were factors which demonstrated a relationship between responses by community college and university women administrators. Willingness to relocate was viewed as unimportant to university women (65.9%) versus community college women (34.1%). Likewise, the table revealed the opposite in terms of being important: Community college--62.2% and university--37.8%.

Research was considered not applicable by community college women administrators (64.9%) while university women administrators considered research important (61.3%). Community college women administrators also specified publications as not applicable (66.7%) while university

TABLE 33

CONTRIBUTING FACTORS  
ANALYSIS BY INSTITUTION TYPE  
SUMMARY DATA\*

Factor	Response Category	Com Col		University		Marginals		X <sup>2</sup>	DF	Significance
		N	%	N	%	N	%			
<b>Formal Education</b>	N/A	1	100.0			1	0.3	2.84	3	0.42
	Unimportant	2	50.0	2	50.0	4	1.2			
	Neither Impt nor Unimpt	3	33.3	6	66.7	9	2.6			
	Important	186	57.1	140	42.9	326	95.9			
-----										
<b>Affirm Action</b>	N/A	36	64.3	20	35.7	56	16.6	2.84	3	0.42
	Unimportant	55	57.9	40	42.1	95	28.2			
	Neither Impt nor Unimpt	51	56.0	40	44.0	91	27.0			
	Important	48	50.5	47	49.5	95	28.2			
-----										
<b>Chance</b>	N/A	47	65.3	25	34.7	72	21.6	4.02	3	0.26
	Unimportant	61	56.5	47	43.5	108	32.3			
	Neither Impt nor Unimpt	40	52.6	36	47.4	76	22.8			
	Important	39	50.0	39	50.0	78	23.4			
-----										

TABLE 33 (continued)

Factor	Response Category	Com Col N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
<b>Mentor</b>	N/A	30	62.5	18	37.5	48	14.5	7.18	3	0.07
	Unimportant	26	49.1	27	50.9	53	16.0			
	Neither Impt nor Unimpt	45	68.2	21	31.8	66	19.9			
	Important	85	51.5	80	48.5	165	49.7			
<b>Internship</b>	N/A	89	57.1	67	42.9	156	46.8	1.40	3	0.71
	Unimportant	40	53.3	35	46.7	75	22.5			
	Neither Impt nor Unimpt	32	62.7	19	37.3	51	15.3			
	Important	27	52.9	24	47.1	51	15.3			
<b>Member</b>	N/A	25	49.0	26	51.0	51	15.0	1.89	3	0.60
	Unimportant	65	55.6	52	44.4	117	34.5			
	Neither Impt nor Unimpt	44	59.5	30	40.5	74	21.8			
	Important	58	59.8	39	40.2	97	28.6			

TABLE 33 (continued)

Factor	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
<b>Leader</b>	N/A	18 43.9	23 56.1	41 12.1	6.08	3	0.11
	Unimportant	55 52.9	49 47.1	104 30.7			
	Neither Impt nor Unimpt	49 66.2	25 33.8	74 21.8			
	Important	69 57.5	51 42.5	120 35.4			
<b>Responsi- bility</b>	N/A	5 62.5	3 37.5	8 2.4	2.38	3	0.50
	Unimportant	4 44.4	5 55.6	9 2.7			
	Neither Impt nor Unimpt	9 75.0	3 25.0	12 3.5			
	Important	173 55.8	137 92.6	310 91.4			
<b>Interim</b>	N/A	55 57.9	40 42.1	95 28.4	1.39	3	0.71
	Unimportant	22 48.9	23 51.1	45 13.5			
	Neither Impt nor Unimpt	21 53.8	18 46.2	39 11.7			
	Important	90 58.1	65 41.9	155 46.4			

TABLE 33 (continued)

Factor	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
<b>Relocate</b>	N/A	97 57.4	72 42.6	169 50.3	9.53	3	0.02
	Unimportant	14 34.1	27 65.9	41 12.1			
	Neither Impt nor Unimpt	26 59.1	18 40.9	44 13.1			
	Important	51 62.2	31 37.8	82 24.4			
<b>Resume</b>	N/A	35 62.5	21 37.5	56 16.8	2.43	3	0.49
	Unimportant	22 50.0	22 50.0	44 13.2			
	Neither Impt nor Unimpt	32 61.5	20 38.5	52 15.6			
	Important	99 54.4	83 45.6	182 54.5			
<b>Timing</b>	N/A	13 68.4	6 31.6	19 5.6	3.31	3	0.35
	Unimportant	10 55.6	8 44.4	18 5.3			
	Neither Impt nor Unimpt	13 43.3	17 56.7	30 8.9			
	Important	155 57.4	115 42.6	270 80.1			

TABLE 33 (continued)

Factor	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
<b>Committees</b>	N/A	46	62.2	28	37.8	74	22.1	2.26	3	0.52
	Unimportant	33	51.6	31	48.4	64	19.1			
	Neither Impt nor Unimpt	37	52.1	34	47.9	71	21.2			
	Important	73	57.9	53	42.1	126	37.6			
<b>Research</b>	N/A	72	64.9	39	35.1	111	33.0	11.53	3	0.01
	Unimportant	50	56.8	38	43.2	88	26.2			
	Neither Impt nor Unimpt	45	60.0	30	40.0	75	22.3			
	Important	24	38.7	38	61.3	62	18.5			
<b>Publica- tions</b>	N/A	70	66.7	35	33.3	105	31.5	13.20	3	0.004
	Unimportant	47	54.0	40	46.0	87	26.1			
	Neither Impt nor Unimpt	44	57.9	32	42.1	76	22.8			
	Important	25	38.5	40	61.5	65	19.5			



TABLE 33 (continued)

Factor	Response Category	Com Col N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
<b>Personnel</b>	N/A	7	50.0	7	50.0	14	4.1	2.46	3	0.48
	Unimportant	9	45.0	11	55.0	20	5.9			
	Neither Impt nor Unimpt	18	66.7	9	33.3	27	8.0			
	Important	158	56.8	120	43.2	278	82.0			
<b>Counseling</b>	N/A	16	50.0	16	50.0	32	9.5	1.47	3	0.69
	Unimportant	18	50.0	18	50.0	36	10.7			
	Neither Impt nor Unimpt	38	55.9	30	44.1	68	59.8			
	Important	118	58.4	84	41.6	202	59.8			
<b>Communica- tion</b>	N/A			4	100.0	4	1.2	7.37	3	0.06
	Unimportant	2	33.3	4	66.7	6	1.8			
	Neither Impt nor Unimpt	4	44.4	5	55.6	9	2.6			
	Important	187	58.1	135	41.9	322	94.4			

TABLE 33 (continued)

Factor	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
<b>Community Relations</b>	N/A	14	63.6	8	36.4	22	6.5	3.37	3	0.34
	Unimportant	20	44.4	25	55.6	45	13.2			
	Neither Impt nor Unimpt	34	56.7	26	43.3	60	17.6			
	Important	124	58.2	89	41.8	213	62.6			
<b>Admin Exp</b>	N/A	17	73.9	6	26.1	23	6.8	4.63	3	0.20
	Unimportant	18	54.5	15	45.5	33	9.8			
	Neither Impt nor Unimpt	26	63.4	15	36.6	41	12.2			
	Important	128	53.3	112	46.7	240	71.2			
<b>Teaching Exp</b>	N/A	30	44.1	38	55.9	68	20.4	6.81	3	0.08
	Unimportant	28	57.1	21	42.9	49	14.7			
	Neither Impt nor Unimpt	32	54.2	27	45.8	59	17.7			
	Important	99	62.7	59	37.3	158	47.3			

TABLE 33 (continued)

Factor	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance			
<b>Admin/ Teach Exp</b>	N/A	33	54.1	28	45.9	61	18.4	1.88	3	0.60
	Unimportant	27	62.8	16	37.2	43	13.0			
	Neither Impt nor Unimpt	26	50.0	26	50.0	52	15.7			
	Important	102	58.0	74	42.0	176	53.0			
<b>Inf Female Network</b>	N/A	59	60.8	38	39.2	97	29.0	1.80	3	0.61
	Unimportant	39	52.0	36	48.0	75	22.5			
	Neither Impt nor Unimpt	38	59.4	26	40.6	64	19.2			
	Important	53	54.1	45	45.9	98	29.3			
<b>Inf Male Network</b>	N/A	64	62.1	39	37.9	103	31.5	6.30	3	0.10
	Unimportant	33	44.0	42	56.0	75	22.9			
	Neither Impt nor Unimpt	37	59.7	25	40.3	62	19.0			
	Important	49	56.3	38	43.7	87	26.0			

TABLE 33 (continued)

Factor	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
<b>For Female Network</b>	N/A	80	62.0	49	38.0	129	38.9	4.78	3	0.19
	Unimportant	47	48.5	50	51.5	97	29.2			
	Neither Impt nor Unimpt	41	59.4	28	40.6	69	20.8			
	Important	19	51.4	18	48.6	37	11.1			
<b>For Male Network</b>	N/A	83	63.4	48	36.6	131	39.7	7.34	3	0.06
	Unimportant	41	46.1	48	53.9	89	27.0			
	Neither Impt nor Unimpt	39	59.1	27	40.9	66	20.0			
	Important	22	50.0	22	50.0	44	13.3			

\*Percentages Rounded

women administrators considered publications important (61.5%) to their career development.

Further review of Table 33 in terms of those factors that showed no significant difference between how community college and university respondents viewed the relative importance revealed the following factors to be considered important: (a) formal education, 95.9%; (b) influence of a mentor, 49.7%; (c) willingness to accept added responsibility, 91.4%; (d) interim assignments, 46.4%; (e) resume, 54.5%; (f) timing, 80.1%; (g) personnel administration skills, 82.0%; (h) counseling skills, 59.8%; (i) communication skills, 94.4%; (j) community relations, 62.6%; (k) prior administrative experience, 71.2%; (l) prior teaching experience, 47.3%; and (m) prior administrative/teaching experience, 53.0%.

The factor considered not applicable by an appreciable number of both community college and university respondents was participation in administrative internship (46.8%). The remaining factors, Affirmative Action plans, chance, membership and leadership in professional organization(s), committee appointments, the informal and formal male networks and the informal and formal female networks, demonstrated a relatively even distribution across all response categories.

### Summary

In summary, of those factors for which there was a difference between community college and university responses according to the oneway ANOVA, willingness to relocate was considered more important to career development by women administrators employed in community colleges. University women administrators stipulated research as more important. According to the cross-tabulation analysis, publications demonstrated a significant difference by institution type. This factor was considered important by university respondents.

Those factors for which there was no significant difference between being considered important by a discernible number of community college and university women administrators were: (a) formal education, (b) willingness to accept added responsibility, (c) communication skills, (d) timing, and (e) personnel administration.

The only factor considered not applicable by an appreciable number of community college and university respondents was participation in an administrative internship.

### Summary

Of those factors which demonstrated a significant difference between how community college and university

women administrators viewed them according to administrative level by institution type, the following were considered important: (a) chance (university), (b) participation in an administrative internship (university), (c) committee appointments (community college), and (d) prior teaching experience (community college). Those factors demonstrating a significant difference by institution type were: (a) willingness to relocate (community college), (b) research (university), and (c) publications (university).

There were a number of factors for which there was no significant difference between the view taken by community college and university women administrators. Those factors specified as important according to administrative level by institution type and according to institution type were formal education, willingness to accept added responsibility, communication skills, timing, and personnel administration skills.

### Analysis of Contributors By Selected

#### Demographic Characteristics

This section addresses Study Question Three and Hypothesis Three with regard to any differences between the responses reflecting importance of contributors according to selected demographic characteristics.

Study Question Three: Does the importance of these contributors differ according to selected demographic characteristics?

Hypothesis Three: There is no significant difference ( $p < .05$ ) of importance of contributors among selected demographic characteristics.

#### Analysis by Race

Table 34 as follows is presented as summary data of a crosstabulations analysis. The Likert Scale points, very unimportant, and unimportant, were considered as cumulative data and are presented as "unimportant." The Likert Scale points, important and very important were combined and presented as "important." The Likert Scale points, not applicable and neither important nor unimportant, are reported intact.

The number of respondents who were American Indian/Native Alaskan, Hispanic, and Asian/Pacific Islander, 3, 10, and 2 respectively, was so small, they were grouped together for further analysis. Even though the responses for the Black race were relatively small (48), they represented 14.0% of the respondents and were, therefore, considered separately.

Analysis of Table 34 with reference to significance revealed that the following factors demonstrated a relationship between how women administrators based on race



TABLE 34  
CONTRIBUTING FACTORS  
ANALYSIS BY RACE/SUMMARY DATA\*

Factor	Response Category	Black		White		Others		Marginals		X <sup>2</sup>	DF	Significance
		N	%	N	%	N	%	N	%			
<b>Formal Education</b>	N/A			1	100.0			1	0.3	2.81	6	0.83
	Unimportant	1	25.0	3	75.0			4	1.2			
	Neither Impt nor Unimpt			9	100.0			9	2.6			
	Important	47	14.4	265	81.3	14	4.3	326	95.9			
<b>Affirm Action</b>	N/A	4	7.1	51	91.1	1	1.8	56	16.6	41.81	6	0.00
	Unimportant	6	6.3	87	91.6	2	2.1	95	28.2			
	Neither Impt nor Unimpt	8	8.8	80	87.9	3	3.3	91	27.0			
	Important	30	31.6	57	60.0	8	8.4	95	28.2			
<b>Chance</b>	N/A	15	20.8	52	72.2	5	6.9	72	21.6	9.25	6	0.16
	Unimportant	14	13.0	88	81.5	6	5.6	108	32.3			
	Neither Impt nor Unimpt	8	10.5	66	86.8	2	3.2	76	22.8			
	Important	8	10.3	69	88.5	1	1.3	78	23.4			

TABLE 34 (continued)

Factor	Response Category	Black		White		Others		Marginals		X <sup>2</sup>	DF	Significance
		N	%	N	%	N	%	N	%			
<b>Mentor</b>	N/A	8	16.7	36	75.0	4	8.3	48	14.5	4.80	6	0.57
	Unimportant	10	18.9	41	77.4	2	3.8	53	16.0			
	Neither Impt nor Unimpt	9	13.6	55	83.3	2	3.0	66	19.9			
	Important	19	11.5	140	84.8	6	3.6	165	49.7			
<b>Internship</b>	N/A	22	14.1	125	80.1	9	5.8	156	46.8	4.96	6	0.55
	Unimportant	9	12.0	65	86.7	1	1.3	75	22.5			
	Neither Impt nor Unimpt	10	19.6	40	78.4	1	2.0	51	15.3			
	Important	7	13.7	41	80.4	3	5.9	51	15.3			
<b>Member</b>	N/A	11	21.6	39	76.5	1	2.0	51	15.0	7.75	6	0.26
	Unimportant	14	10.8	98	83.8	5	4.3	117	34.5			
	Neither Impt nor Unimpt	8	10.8	60	81.1	6	8.1	74	21.8			
	Important	15	15.5	80	82.5	2	2.1	97	28.6			

TABLE 34 (continued)

Factor	Response Category	Black		White		Others		Marginals		X <sup>2</sup>	DF	Significance
		N	%	N	%	N	%	N	%			
<b>Leader</b>	N/A	9	22.0	30	73.2	2	4.9	41	12.1	2.74	6	0.84
	Unimportant	13	12.5	87	83.7	4	3.8	104	30.7			
	Neither Impt nor Unimpt	10	13.5	60	81.1	4	5.4	74	21.8			
	Important	16	13.3	99	82.5	5	4.2	120	35.4			
<b>Responsi- bility</b>	N/A	2	25.0	6	75.0			8	2.4	6.59	6	0.36
	Unimportant	1	11.1	7	77.8	1	11.1	9	2.7			
	Neither Impt nor Unimpt	4	33.3	8	66.7			12	3.5			
	Important	40	12.9	257	82.9	13	4.2	310	91.4			
<b>Interim</b>	N/A	17	17.9	72	75.8	6	5.3	95	28.4	6.58	6	0.36
	Unimportant	3	6.7	41	91.1	1	2.2	45	13.5			
	Neither Impt nor Unimpt	7	17.9	30	76.9	2	5.1	39	11.7			
	Important	19	12.3	131	84.5	5	3.2	155	46.4			

TABLE 34 (continued)

Factor	Response Category	Black		White		Others		Marginals		X <sup>2</sup>	DF	Significance
		N	%	N	%	N	%	N	%			
<b>Relocate</b>	N/A	27	16.0	133	78.7	9	5.3	169	50.3	5.56	6	0.47
	Unimportant	4	9.8	34	82.9	3	7.3	41	12.2			
	Neither Impt nor Unimpt	7	15.9	37	84.1			44	13.1			
	Important	10	12.2	70	85.4	2	2.4	82	24.4			
<b>Resume</b>	N/A	3	5.4	51	91.1	2	3.6	56	16.8	10.58	6	0.10
	Unimportant	3	6.8	39	88.6	2	1.8	44	13.2			
	Neither Impt nor Unimpt	7	13.5	41	78.8	4	7.7	52	15.6			
	Important	34	18.7	142	78.0	6	3.3	182	54.5			
<b>Timing</b>	N/A	2	10.5	16	84.2	1	5.3	19	5.6	3.38	6	0.76
	Unimportant	2	11.1	14	77.8	2	11.1	18	5.3			
	Neither Impt nor Unimpt	4	13.3	24	80.0	2	6.7	30	8.9			
	Important	38	14.1	223	82.6	9	3.3	270	80.1			

TABLE 34 (continued)

Factor	Response Category	Black		White		Others		Marginals		X <sup>2</sup>	DF	Significance
		N	%	N	%	N	%	N	%			
<b>Committees</b>	N/A	14	18.9	57	77.0	3	4.1	74	22.1	3.41	6	0.76
	Unimportant	6	9.4	56	87.5	2	3.1	64	19.1			
	Neither Impt nor Unimpt	9	12.7	58	81.7	4	5.6	71	21.2			
	Important	17	13.5	104	82.5	5	4.0	126	37.6			
-----												
<b>Research</b>	N/A	17	15.3	86	77.5	8	7.2	111	33.0	10.23	6	0.11
	Unimportant	6	6.8	80	90.9	2	2.3	88	26.2			
	Neither Impt nor Unimpt	14	18.7	58	77.3	3	4.0	75	22.3			
	Important	10	16.1	51	82.3	1	1.6	62	18.5			
-----												
<b>Publica- tions</b>	N/A	18	17.1	79	75.2	8	7.6	105	31.5	10.20	6	0.12
	Unimportant	6	6.9	79	90.8	2	2.3	87	26.1			
	Neither Impt nor Unimpt	13	17.1	61	80.3	2	2.6	76	22.8			
	Important	10	15.4	53	81.5	2	3.1	65	19.5			
-----												

TABLE 34 (continued)

Factor	Response Category	Black		White		Others		Marginals		X <sup>2</sup>	DF	Significance
		N	%	N	%	N	%	N	%			
<b>Personnel</b>	N/A	5	35.7	9	64.3			14	4.1	13.69	6	0.03
	Unimportant	3	15.0	14	70.0	3	15.0	20	5.9			
	Neither Impt nor Unimpt	3	11.1	22	81.5	2	7.4	27	8.0			
	Important	36	12.9	233	83.8	9	3.2	278	82.0			
<b>Counseling</b>	N/A	8	25.0	22	68.8	2	6.3	32	9.5	6.57	6	0.36
	Unimportant	4	11.1	29	80.6	3	8.3	36	10.7			
	Neither Impt nor Unimpt	9	13.2	56	82.4	3	4.4	68	20.1			
	Important	26	12.9	170	84.2	6	3.0	202	59.8			
<b>Communica- tion</b>	N/A	2	50.0	2	50.0			4	1.2	12.26	6	0.06
	Unimportant	3	50.0	3	50.0			6	1.8			
	Neither Impt nor Unimpt	1	11.1	7	77.8	1	11.1	9	2.6			
	Important	42	13.0	267	82.9	13	4.0	322	94.4			

TABLE 34 (continued)

Factor	Response Category	Black		White		Others		Marginals		X <sup>2</sup>	DF	Significance
		N	%	N	%	N	%	N	%			
<b>Community Relations</b>	N/A	2	9.1	20	90.9			22	6.5	3.88	6	0.69
	Unimportant	6	13.3	37	82.2	2	4.4	45	13.2			
	Neither Impt nor Unimpt	6	10.0	50	83.3	4	6.7	60	17.6			
	Important	34	16.0	171	80.3	8	3.8	213	62.6			
<b>Admin Exp</b>	N/A	6	26.1	13	56.5	4	17.4	23	6.8	18.55	6	0.01
	Unimportant	7	14.9	24	72.7	2	6.1	33	9.8			
	Neither Impt nor Unimpt	5	12.2	33	80.5	3	7.3	41	12.2			
	Important	29	12.1	205	85.4	6	2.5	240	71.4			
<b>Teaching Exp</b>	N/A	8	11.8	54	79.4	6	8.8	68	20.4	5.59	6	0.47
	Unimportant	8	16.3	40	81.6	1	2.0	49	14.7			
	Neither Impt nor Unimpt	9	15.3	49	83.1	1	1.7	59	17.7			
	Important	21	13.3	131	82.9	6	3.8	158	47.3			

TABLE 34 (continued)

Factor	Response Category	Black		White		Others		Marginals		X <sup>2</sup>	DF	Significance
		N	%	N	%	N	%	N	%			
<b>Admin/ Teach Exp</b>	N/A	10	16.4	47	77.0	4	6.6	61	18.4	4.03	6	0.67
	Unimportant	7	16.3	33	76.7	3	7.0	43	13.0			
	Neither Impt nor Unimpt	5	9.6	45	86.5	2	3.8	52	15.7			
	Important	24	13.6	147	83.5	5	2.8	176	53.0			
<b>Inf Female Network</b>	N/A	16	16.5	76	78.4	5	5.2	97	29.0	8.36	6	0.21
	Unimportant	5	6.7	65	86.7	5	6.7	75	22.5			
	Neither Impt nor Unimpt	11	17.2	51	79.7	2	3.1	64	19.2			
	Important	15	15.3	82	83.7	1	1.0	98	29.3			
<b>Inf Male Network</b>	N/A	16	15.5	83	80.6	4	3.9	103	31.5	2.52	6	0.87
	Unimportant	9	12.0	62	82.7	4	5.3	75	22.9			
	Neither Impt nor Unimpt	9	14.5	50	80.6	3	4.8	62	19.0			
	Important	9	10.3	76	87.4	2	2.3	87	26.6			



TABLE 34 (continued)

Factor	Response Category	Black		White		Others		Marginals		X <sup>2</sup>	DF	Significance
		N	%	N	%	N	%	N	%			
<b>For Female Network</b>	N/A	23	17.8	102	79.1	4	3.1	129	38.9	4.66	6	0.59
	Unimportant	9	9.3	83	85.6	5	5.2	97	29.2			
	Neither Impt nor Unimpt	8	11.6	58	84.1	3	4.3	69	20.8			
	Important	4	10.8	32	86.5	1	2.7	37	11.1			
<b>For Male Network</b>	N/A	23	17.6	103	78.6	5	3.8	131	39.7	4.09	6	0.67
	Unimportant	9	10.1	76	85.4	4	4.5	89	27.0			
	Neither Impt nor Unimpt	8	12.1	55	83.3	3	4.5	66	20.0			
	Important	4	9.1	39	88.6	1	2.3	44	13.1			

\*Percentages Rounded

viewed the various factors: (a) Affirmative Action plans (0.00), (b) personnel administration skills (0.03), and (c) prior administrative experience (0.01). Affirmative Action plans were considered not applicable (91.1%), unimportant (91.6%), and neither important nor unimportant (87.9%) by a considerable number of White women administrators versus the Black and Other respondents. This factor appeared to also be viewed as important by the White respondents (60.0%) as opposed to the Black and Other respondents.

Personnel administration skills and prior administrative experience were equally viewed as important, neither important nor unimportant, unimportant, and not applicable by a discernible number of White respondents. The White respondents did not consider these contributors as strong from any viewpoint.

Further analysis of the contributing factors revealed the following to be considered important by an appreciable number of women administrators regardless of race: (a) formal education, 95.9%, (b) influence of a mentor, 49.7%, (c) willingness to accept added responsibility, 91.4%, (d) interim assignments, 46.4%, (e) resume, 54.5%, (f) timing, 80.1%, (g) counseling skills, 59.8%, (g) communication skills, 94.4%, (h) community relations, 62.6%, (i) prior teaching experience, 47.3%, and (j) prior administrative and teaching experience, 53.0%. Those factors considered not applicable were participation in a formal internship

(46.8%) and willingness to relocate (50.3%). The distribution of responses for the remainder of the contributing factors was equal across all response categories. The remainder of the factors revealed no significant difference between the view respondents took of those factors according to their race.

### Summary

Those factors revealing a significant difference by women administrators according to their race were Affirmative Action plans, personnel administration skills, and prior administrative experience. Affirmative Action plans were equally viewed as not applicable, unimportant, and neither important nor unimportant by White women administrators. Parallel responses of important and neither important nor unimportant for personnel administration and prior administrative experience were demonstrated by White respondents.

The factors for which there was no significant difference in response by race and were considered important by a considerable number of women were: formal education, willingness to accept added responsibility, timing, and communication skills. The only factors considered not applicable by all groups were participation in a formal administrative internship and willingness to relocate.

### Analysis by Age

Tables 35 through 60 in Appendix H present summary data of a crosstabulations analysis of the contributing factors according to age. Review of these tables revealed that there is a relationship between the responses given by women administrators according to their age ( $p < .05$ ) for the following factors: (a) Affirmative Action plans, (b) influence of a mentor, (c) participation in a formal administrative internship, (d) research, (e) personnel administration skills, (f) prior teaching experience, and (g) prior administrative and teaching experience.

Of the respondents who considered Affirmative Action plans unimportant, 36.8% and 37.9% were in the 31-40 and the 41-50 age groups, respectively. However, it was also considered important by the same age groups, 31-40 (38.9%) and 41-50 (37.9%). The responses for the other age groups were evenly distributed over the response categories.

The 41-50 age group stipulated the factor, influence of a mentor, not applicable (41.7%). It was considered as ambiguous by the 31-40 age group (43.9%). This factor was considered important by the 31-40 (34.5%) and 41-50 (36.4%) age groups. The remaining responses were distributed over the response categories.

Participation in a formal administrative internship was identified as important to career development by the

31-40 age group (51.0%). The remaining responses were distributed across the response categories.

Research was considered more important to the 41-50 age group (45.2%) as a factor to their career development. The other responses for the other age groups were distributed over the response categories.

The contributing factor, personnel administration skills, was stipulated as important to their career development by the respondents in the age groups 31-40 (34.5%) and 41-50 (36.0%). The remaining responses were distributed evenly over the response categories.

The respondents in the 31-40 age group stipulated that prior teaching experience (44.1%) and prior administrative and teaching experience (42.3%) were ambiguous to their career development. The remaining responses were distributed over the response categories.

Analysis of those factors for which there was no difference between how the age groups viewed the various factors revealed the following. Formal education was considered important (95.9%) to career development regardless of age. Communication skills (94.4%), willingness to accept added responsibility (91.4%), timing (80.1%), prior administrative experience (71.2%), community relations (62.6%), counseling (59.8%), resume (54.5%), and interim assignments (46.4%), were also considered important.

The factor that was considered not applicable was willingness to relocate (50.3%). All remaining factors demonstrated an equal distribution of responses across the response categories.

### Summary

A number of factors demonstrated a relationship between responses. Of these, respondents in the 31-40 and 41-50 age groups, the following factors were considered important: (a) Affirmative Action plans, (b) influence of a mentor, and (c) personnel administration skills. Participation in a formal administrative internship was considered important by the 31-40 age group. Research was considered important to career development by the 41-50 age group.

Affirmative Action plans were considered unimportant by the 31-40 and 41-50 age groups. The following factors were considered neither important nor unimportant to the 31-40 age group: (a) influence of a mentor, (b) prior teaching experience, and (c) prior administrative and teaching experience. Influence of a mentor was stipulated as not applicable by the 41-50 age group.

There were a number of factors for which there was no significant difference in the responses relative to age. With respect to those factors that demonstrated the highest response percentages, formal education, communication

skills, willingness to accept added responsibility, and timing were considered important to career development.

Only willingness to relocate was identified as not applicable.

The responses for all remaining factors were distributed evenly across the response categories.

#### Summary

The summary of the data analysis based on selected demographic characteristics of the respondents revealed the following.

Of the factors for which there was a significant difference, analysis revealed that according to race the White respondents viewed Affirmative Action plans equally as neutral, unimportant, and not applicable to career development. Prior administrative experience and personnel administration skills were viewed as important and neutral by White respondents to career development.

A number of factors analyzed according to age demonstrated a significant difference in the relative importance to career development. Those factors viewed as important by the 31-50 age group were Affirmative Action plans, influence of a mentor, and personnel administration skills. The 31-40 age group respondents viewed participation in a formal administrative internship as important.

Research was stipulated as important by those in the 41-50 age group.

The influence of a mentor was specified equally as neutral and not applicable by the respondents in the 31-40 and 41-50 age groups, respectively. Prior teaching experience and prior administrative and teaching experience were stipulated as neutral to the respondents in the age group 31-40. Affirmative Action plans was viewed as unimportant to those aged 31-50.

There were a number of factors for which there was no significant difference in response by race or age. Formal education, communication skills, willingness to accept added responsibility, and timing were considered important to career development by race and age. Participation in a formal administrative internship was considered not applicable by race. Willingness to relocate was identified as not applicable by race and by age.

The responses for the remaining factors were distributed evenly across the response categories for both race and age.

#### Chapter Summary

Very few systematic trends were observed for those factors which demonstrated a significant difference in how women viewed their career development. Chance and participation in a formal administrative internship, however,



differed across community colleges and universities at levels 5 and 4, respectively, with university women placing greater emphasis on their importance. Community college respondents on level 3 placed greater emphasis on committee appointments while those on level 6 emphasized prior teaching experience.

Of those factors that differed across institutions, willingness to relocate was viewed more important by community college respondents. The university respondents placed more emphasis on research and publications.

Racial comparison revealed personnel administration skills and prior administrative experience as more important to Whites than Blacks.

Age comparison showed Affirmative Action plans, influence of a mentor, and personnel administration skills were important to the respondents in the 31-40 and 41-50 brackets. The respondents in the 31-40 age group viewed participation in a formal administrative internship as important while research was emphasized by the respondents who were 41-50.

A number of factors were considered neither important nor unimportant according to level by institution type. The respondents on level 2 employed in community colleges identified the informal male network as ambiguous. Community college respondents on level 4 revealed participation

in a formal administrative internship and prior administrative experience as neutral to their career development while those on level 6 viewed prior teaching experience as neutral. The only factor revealing significant difference according to university respondents was chance at level 5.

The significant difference demonstrating neutrality according to race was for the White respondents. The factors identified were Affirmative Action plans, personnel administration skills, and prior administrative experience.

A comparison for significant difference by age group revealed influence of a mentor and prior administrative and teaching experience to be neither important nor unimportant for the respondents in age groups 31-40 and 41-50.

The factor, chance, differed between community colleges and universities by administrative level with respondents on level 5 in community colleges viewing it more unimportant. There was a significant difference for Affirmative Action plans according to race (White) and age (31-50).

Of those factors for which there was a significant difference, participation in a formal administrative internship and prior administrative experience were considered not applicable according to community college level 4 respondents. Committee appointments and the informal male network were considered not applicable by

community college respondents on levels 3 and 2 respectively. Prior teaching experience was the only factor viewed not applicable by university respondents, and they were on level 6.

In an analysis according to race and age for factors considered not important, the following demonstrated a significant difference: Affirmative Action plans (White) and influence of a mentor (41-50).

Four factors were revealed for which there was no significant difference in how women administrators viewed their relative importance from an overall standpoint, by institution type, by administrative level in institution type, by race, and by age. Those factors were: formal education, willingness to accept added responsibility, timing, and communication skills.

The remaining contributing factors demonstrated responses evenly distributed across all categories for each variable.

## CONCLUSIONS/RECOMMENDATIONS

This section presents a summary of the procedures used, the conclusions resulting from the data analysis, implications, and recommendations for future research.

### Summary of Procedures

The purpose of this study was to determine the importance placed on various contributing factors to career development as stipulated by women in higher education administrative positions in Florida public community colleges and universities.

### Study Questions and Hypotheses

The study questions and hypotheses for this study were:

Study Question One: What contributors to career development do women in higher education administration rank as important?

Study Question Two: What is the importance of contributors to career development for women in higher education administration?

Study Question Three: Does the importance of these contributors differ according to selected demographic characteristics?

Hypothesis One: There is no significant difference ( $p < .05$ ) among the importance of contributors to career development by administrative level between community college and university women administrators in Florida.

Hypothesis Two: There is no significant difference ( $p < .05$ ) among the importance of contributors to career development between community college and university women administrators in Florida.

Hypothesis Three: There is no significant difference ( $p < .05$ ) of importance of contributors among selected demographic characteristics.

#### Sample

Questionnaires were sent to 524 persons randomly selected from a total population of 668 women in higher education administrative positions at the director/chairperson level through the president level currently employed in Florida community colleges and universities. Of the 348 questionnaires returned, 343 were useable providing a response rate of 65.5% and representing 51.3% of the population. The sample was selected utilizing the interactive mode of a mailing label database (Pringle, 1986) with dBase III (1984). The database column used to

generate a mailing label was displayed on an IBM-PC screen. No name or other identifying information was displayed. The column was randomly marked with a "y" to generate a label.

### Instrumentation

The instrument utilized for data collection was a mailed questionnaire comprised of four sections: information relevant to the current position, contributing factors, information relevant to previous experience, and personal characteristics. A letter of introduction was incorporated into the questionnaire.

### Procedures

These data were subjected to a variety of statistical analysis techniques. Descriptive analysis was conducted utilizing frequency distributions and histograms to address study questions One and Two. Study Question Three and hypotheses One and Three were addressed using a crosstabulation analysis. A oneway analysis of variance (ANOVA) and a crosstabulation analysis were utilized to address Hypothesis Two.

### Conclusions

The findings of this study do not differ with the commonly held view by those in academe of the mission of universities and community colleges. Universities tend to

emphasize research and publication to a much greater extent than community colleges. Administrators seeking advancement in community college administration should be willing to relocate. Therefore, the type of institution an administrator is employed in may influence those factors considered important to career development.

Those factors that demonstrated a significant difference according to administrative level by institution type and were considered important were at levels 4, 5, and 6, except committee appointments which were considered important by community college respondents on level 3. There were no factors identified as important by the respondents on levels 1, 2, and 7 for either type institution as being significantly different according to administrative level by institution type. It appears that the administrative level of an individual has little influence on the importance placed on factors contributing to career development.

Interestingly enough, those factors for which there was a significant difference in the view taken according to race, there were none considered important by the non-White respondents. Only personnel administration skills and prior administrative experience were identified by the White respondents as important. Dependent upon position requirements, these factors are often integral to one's eligibility for advancement. The emphasis placed on

Affirmative Action plans relative to women and minority advancement by race was not further supported by the results of this study.

The age groups for which there was any significant difference in the viewpoint of the various factors were 31-40 and 41-50 with a near equal split in the response distribution for these age groups. The only significance placed on Affirmative Action plans was by these age groups. These age groups may have been effected by such plans because of the timing of legislation implementation in relation to their career development. The influence of a mentor may also have impacted respondents in these age groups because of the timing of the career development. This factor was considered significantly different by those in the age bracket 31-50.

The factors considered important across all variables, but demonstrated no significant difference in the view taken by the respondents for any variable were formal education, willingness to accept added responsibility, timing, and communication skills.

#### Implications

A number of implications arise from this study. An individual desiring to advance into higher education administration should establish a career plan. Because this study indicated that some contributing factors are



viewed more important than others according to institution type, the individual should determine if the community college or university is the ultimate goal for administrative advancement. If the community college is the goal, one should possess a willingness to relocate. However, one should participate in research and publication activities if advancement in the university setting is desired.

The formal preparation of oneself in terms of education is important to career development. Women should pursue a degree which corresponds to their advancement aspirations as it seems that being over or under credentialed inhibits career development. One should also give careful consideration to the field of study as it relates to the area of interest in administration, i.e., personnel administration, financial affairs, or academic affairs.

Since we currently live in an information society, an individual seeking an administrative position must be able to convey ideas and information. Therefore, one must possess communication skills in both the oral and written form. This item was ranked very high by the respondents in this study.

Timing is important because when opportunities for advancement arise and one is not appropriately prepared, the position is out of reach. Women must progressively and

continuously add to their preparation for career advancement. One method supported by this research is to accept added responsibility. As Ernst (1982) indicated, women should accept assignments and appointments in areas in which they have little background or experience. These areas should also be ones in which they have a sufficient chance of succeeding. Accepting added responsibility not only broadens knowledge and experience, but also provides an opportunity for others to observe and recognize an individual's capabilities.

The emphasis placed on mentoring and networking, especially with other women administrators, as presented in the current literature may not be as important to career development as those factors identified in this study. Perhaps the conscious effort given to developing these relationships would better be expended on formal education, research, publication, and gaining experience because it is the opinion of this researcher that these activities plus committee appointments, interim assignments, and participation in a formal administrative internship are underlying constructs of willingness to accept added responsibility. The demonstration of ability through adequate performance of additional responsibilities provides a mechanism for these activities to have an effect on

career development. There is potential for the development of a model for advancement of women into higher education administration. However, that was not the intent of this study.

This researcher has attempted to identify the contributors of importance to women in higher education. An established career plan should revolve around the contributors identified in this research. This investigator is of the opinion that these activities will provide the opportunity to be observed by individuals who may be in a position to influence advancement.

#### Recommendations

Future research in this area may include the following:

1. Further research should be conducted by replication to a like sample of women beyond the state of Florida.
2. Further research should be conducted by replication to the same sample in three years to establish how attitudes have changed with relation to career development.
3. Further research should be conducted by replication to a sample of women just entering their first administrative level position in higher education to ascertain a baseline for continued trend research in this area.

4. Further research should be conducted by replication to a similar population of males.

5. Further research should be conducted to determine how this study relates to Affirmative Action plans in Florida.

6. Further research should be conducted to determine the utility of the results of this study in terms of establishing career goals in higher education administration.

APPENDICES

APPENDIX A  
FLORIDA PUBLIC COMMUNITY COLLEGES  
AND UNIVERSITIES

FLORIDA PUBLIC COMMUNITY COLLEGES  
AND UNIVERSITIES ACCREDITED BY  
THE SOUTHERN ASSOCIATION OF  
COLLEGES AND SCHOOLS

Level I

Associate Degree

Brevard Community College, Cocoa  
Broward Community College, Fort Lauderdale  
Central Florida Community College, Ocala  
Chipola Junior College, Marianna  
Daytona Beach Community College, Daytona Beach  
Edison Community College, Fort Myers  
Florida Junior College, Jacksonville  
Florida Keys Community College, Key West  
Gulf Coast Community College, Panama City  
Hillsborough Community College, Tampa  
Indian River Community College, Fort Pierce  
Lake City Community College, Lake City  
Lake-Sumter Community College, Leesburg  
Manatee Junior College, Bradenton  
Miami-Dade Community College, Miami  
North Florida Junior College, Madison  
Okaloosa-Walton Community College, Niceville

Palm Beach Community College, Lake Worth  
Pasco-Hernando Community College, Dade City  
Pensacola Junior College, Pensacola  
Polk Community College, Winter Haven  
St. Johns River Community College, Palatka  
St. Petersburg Junior College, St. Petersburg  
Santa Fe Community College, Gainesville  
Seminole Community College, Sanford  
South Florida Community College, Avon Park  
Tallahassee Community College, Tallahassee  
Valencia Community College, Orlando

### Level III

#### Bachelor's and Master's Degrees

Florida International University, Miami  
University of North Florida, Jacksonville  
University of West Florida, Pensacola

### Level IV

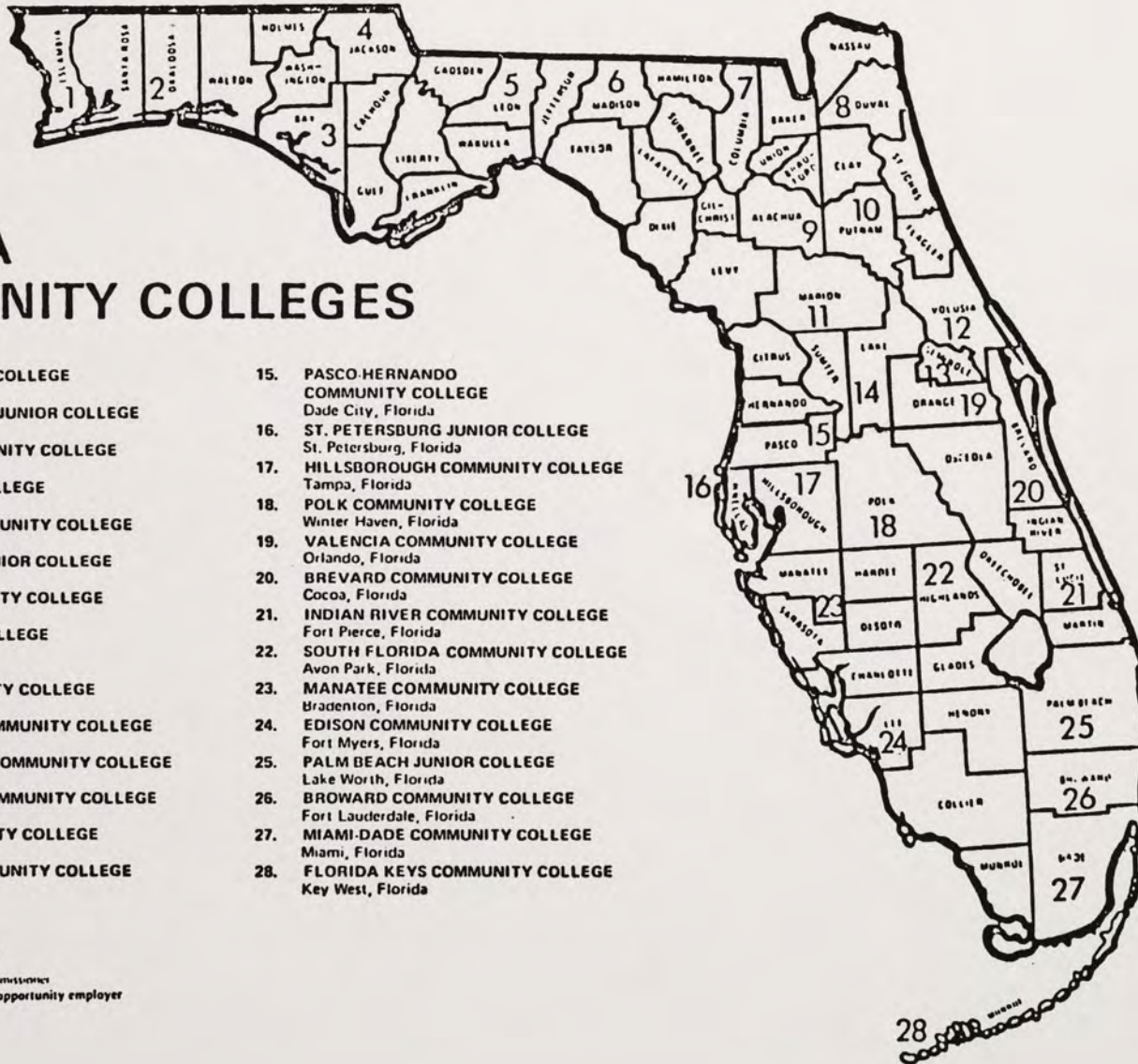
#### Bachelor's, Master's and Doctoral Degrees

University of Central Florida, Orlando  
University of Central Florida, Gainesville  
Florida A. and M. University, Tallahassee  
Florida Atlantic University, Boca Raton  
Florida State University, Tallahassee  
University of South Florida, Tampa



# FLORIDA COMMUNITY COLLEGES

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. PENSACOLA JUNIOR COLLEGE<br/>Pensacola, Florida</li> <li>2. OKALOOSA-WALTON JUNIOR COLLEGE<br/>Niceville, Florida</li> <li>3. GULF COAST COMMUNITY COLLEGE<br/>Panama City, Florida</li> <li>4. CHIPOLA JUNIOR COLLEGE<br/>Marianna, Florida</li> <li>5. TALLAHASSEE COMMUNITY COLLEGE<br/>Tallahassee, Florida</li> <li>6. NORTH FLORIDA JUNIOR COLLEGE<br/>Madison, Florida</li> <li>7. LAKE CITY COMMUNITY COLLEGE<br/>Lake City, Florida</li> <li>8. FLORIDA JUNIOR COLLEGE<br/>AT JACKSONVILLE<br/>Jacksonville, Florida</li> <li>9. SANTA FE COMMUNITY COLLEGE<br/>Gainesville, Florida</li> <li>10. ST. JOHNS RIVER COMMUNITY COLLEGE<br/>Palatka, Florida</li> <li>11. CENTRAL FLORIDA COMMUNITY COLLEGE<br/>Ocala, Florida</li> <li>12. DAYTONA BEACH COMMUNITY COLLEGE<br/>Daytona Beach, Florida</li> <li>13. SEMINOLE COMMUNITY COLLEGE<br/>Sanford, Florida</li> <li>14. LAKE-SUMTER COMMUNITY COLLEGE<br/>Leesburg, Florida</li> </ol> | <ol style="list-style-type: none"> <li>15. PASCO HERNANDO<br/>COMMUNITY COLLEGE<br/>Dade City, Florida</li> <li>16. ST. PETERSBURG JUNIOR COLLEGE<br/>St. Petersburg, Florida</li> <li>17. HILLSBOROUGH COMMUNITY COLLEGE<br/>Tampa, Florida</li> <li>18. POLK COMMUNITY COLLEGE<br/>Winter Haven, Florida</li> <li>19. VALENCIA COMMUNITY COLLEGE<br/>Orlando, Florida</li> <li>20. BREVARD COMMUNITY COLLEGE<br/>Cocoa, Florida</li> <li>21. INDIAN RIVER COMMUNITY COLLEGE<br/>Fort Pierce, Florida</li> <li>22. SOUTH FLORIDA COMMUNITY COLLEGE<br/>Avon Park, Florida</li> <li>23. MANATEE COMMUNITY COLLEGE<br/>Bradenton, Florida</li> <li>24. EDISON COMMUNITY COLLEGE<br/>Fort Myers, Florida</li> <li>25. PALM BEACH JUNIOR COLLEGE<br/>Lake Worth, Florida</li> <li>26. BROWARD COMMUNITY COLLEGE<br/>Fort Lauderdale, Florida</li> <li>27. MIAMI-DADE COMMUNITY COLLEGE<br/>Miami, Florida</li> <li>28. FLORIDA KEYS COMMUNITY COLLEGE<br/>Key West, Florida</li> </ol> |
|--|---|



State of Florida  
Department of Education  
Tallahassee, Florida  
Ralph D. Turington, Commissioner  
Affirmative action/equal opportunity employer



STATE UNIVERSITY  
SYSTEM OF FLORIDA

APPENDIX B

LETTER TO AFFIRMATIVE ACTION OFFICER

Dear

As a fellow state employee at the University of Central Florida (UCF), I am requesting your assistance in the completion of my dissertation for a doctorate in Educational Administration and Supervision. Dr. Carol Surles, Associate Vice President for Human Resources at UCF is a member of my doctoral committee and suggested I contact you.

My dissertation topic addresses the importance women in higher education administrative positions place on various contributors to their career development. The population for my study is women in higher education administrative positions in the 28 Florida community colleges and the 9 Florida State universities. The administrative levels included in my study are: Coordinator, director, chairperson, assistant dean, associate dean, dean, assistant vice president, associate vice president, vice president, assistant vice provost, associate vice provost, provost, president, and "assistant to" any of these categories for both the academic and service areas of the organizational structure.

A questionnaire will be the instrument utilized to collect data. Attached is a list of women in your institution who currently hold or have held such administrative positions as those noted above. Would you please take a few minutes to review and update the list in terms of women currently occupying administrative positions in your institution. I have enclosed a self-addressed, stamped, return envelope for your convenience. Your kind attention to this request will be greatly appreciated. I would appreciate receiving the updated list not later than January 28, 1986. Thanking you in advance for your assistance, I remain. . .

Sincerely,

*Lynda A. Kuyper*

Lynda A. Kuyper  
Ed.D. Candidate  
Educational Administration  
and Supervision

Enclosure: Questionnaire

APPENDIX C  
QUESTIONNAIRE



University of Central Florida  
Bldg 12 Room 220  
P.O. Box 25000  
Orlando, FL 32816

NON-PROFIT ORGN  
U.S. POSTAGE PAID  
PERMIT NO 3575  
ORLANDO, FLORIDA

Dear Administrator:

This letter is to request your participation in a study investigating the importance women in higher education administrative positions place on the various contributors to their career development. Participation in this study will involve completing and returning the attached questionnaire.

The information provided by you and other respondents will be reported in aggregate form only with identifiers completely removed. To further assure confidentiality of information, all returned questionnaires will be kept in my possession and processed by me. The code on the cover letter serves only as a control for a follow-up mailing. After the code is matched to your name on a master list, the cover letter will be removed.

Dear Colleague:

Ms. Lynda Kuyper is completing research on "An Investigation of Career Development by Community College and University Women: Perceived Importance of Contributors to Advancement into Higher Education Administration." Through an extensive review of literature, Ms. Kuyper has listed several factors which have been identified as contributors to the career development of women administrators in higher education.

I know that you are very busy. However, because the results will be valuable, I urge you to complete and return the questionnaire.

Your return of the completed questionnaire will indicate your consent to participate in the study, although you are free to terminate your participation by informing me at the address indicated on the questionnaire.

Thank you for taking the time to respond to this questionnaire and returning it before February 28, 1986.

Sincerely,

*Lynda A. Kuyper*  
Lynda A. Kuyper  
Ed.D. Candidate  
Educational Administration  
& Supervision

If you have any questions, do not hesitate to call me at (305) 275-2939 or if you wish to receive a copy of the results, please notify Ms. Kuyper or myself.

Cordially,

*Larry R. Hudson*  
Larry R. Hudson, Ph.D.  
Research Supervisor and  
Assistant Professor  
Instructional Programs

A Study of Importance of Contributors  
to Career Development  
Instructions

1. Most questions can be answered by checking ( ) one of the answers. If you do not find the exact answer that fits your case, check the one that comes closest. Other questions request information to be listed on the blanks provided. Please answer all questions.
2. Please feel free to write any explanations or comments you may have in the margins of the questionnaire.
3. Your answers will be kept confidential.
4. Please fold and staple questionnaire so that the return address is visible.
5. Return the completed questionnaire not later than February 28, 1986.
6. For results of the study, please contact: Lynda A. Kuyper  
2737 Graduate Ct.  
Orlando, Fl. 32826

Thank you.

Section I - Current Position

1. What is your present position title? \_\_\_\_\_
2. After you received your bachelor's degree, how long did it take you to achieve your current position? (Please exclude any fulltime commitment to raising a family and/or educational enrollment.)  
\_\_\_\_\_ yrs. \_\_\_\_\_ mos.
3. In achieving your present position, do you think your gender was:
  - ( ) irrelevant
  - ( ) of little importance
  - ( ) important
  - ( ) somewhat important
  - ( ) very important
4. Which statement best describes how you attained your present position?
  - ( ) self-initiated application
  - ( ) approached by individual
  - ( ) approached by search committee
  - ( ) nominated
  - ( ) promoted
  - ( ) informally referred
  - ( ) not known
  - ( ) other (specify) \_\_\_\_\_
5. Are you the first female to hold this position?
  - ( ) yes
  - ( ) no
  - ( ) new position
  - ( ) do not know
6. How long have you held this position? \_\_\_\_\_ yrs. \_\_\_\_\_ mos.
7. To determine the level of your current position in the administrative hierarchy, please indicate how many administrative levels you must report through to the chief executive officer/president/provost (do not count yourself or the chief executive officer/president/provost).  
Number of levels \_\_\_\_\_
8. Type of institution in which you are employed:
  - ( ) community college
  - ( ) university
  - ( ) other

### Section II - Contributors

Listed below are factors identified in the literature as contributing to career development of women in higher education administration. Please review the list and place a check in the appropriate column for each factor as it relates to the attainment of your current position (5 = very important; 4 = important; 3 = neither important nor unimportant; 2 = unimportant; 1 = very unimportant; and 0 = not applicable).

Contributing Factors	5	4	3	2	1	0
9. formal education	( )	( )	( )	( )	( )	( )
10. affirmative action plans	( )	( )	( )	( )	( )	( )
11. chance/luck	( )	( )	( )	( )	( )	( )
12. influence of a mentor	( )	( )	( )	( )	( )	( )
13. formal administrative internship	( )	( )	( )	( )	( )	( )
14. membership in professional organization(s)	( )	( )	( )	( )	( )	( )
15. leadership in professional organization(s)	( )	( )	( )	( )	( )	( )
16. willingness to assume added responsibility	( )	( )	( )	( )	( )	( )
17. interim assignment(s)	( )	( )	( )	( )	( )	( )
18. willingness to relocate	( )	( )	( )	( )	( )	( )
19. resume'	( )	( )	( )	( )	( )	( )
20. timing	( )	( )	( )	( )	( )	( )
21. committee appointment(s)	( )	( )	( )	( )	( )	( )
22. research	( )	( )	( )	( )	( )	( )
23. publications	( )	( )	( )	( )	( )	( )
24. personnel administration skills	( )	( )	( )	( )	( )	( )
25. counseling skills	( )	( )	( )	( )	( )	( )
26. communication skills	( )	( )	( )	( )	( )	( )
27. community relations	( )	( )	( )	( )	( )	( )
28. prior administrative experience	( )	( )	( )	( )	( )	( )
29. prior teaching experience	( )	( )	( )	( )	( )	( )
30. prior administrative and teaching experience	( )	( )	( )	( )	( )	( )
31. informal female network *	( )	( )	( )	( )	( )	( )
32. informal male network *	( )	( )	( )	( )	( )	( )
33. formal female network **	( )	( )	( )	( )	( )	( )
34. formal male network **	( )	( )	( )	( )	( )	( )

\* Defined as a support system for providing information to each other on an informal basis.

\*\* Defined as a support system for providing information to each other through a formal organization.

(Please use the space below to list, in order of importance, any contributors to the attainment of your current position not listed above.)

### Section III - Previous Experience

35. How many consecutive years and/or months have you been employed at your current institution?

\_\_\_\_ yrs. \_\_\_\_ mos.

36. Did your higher education administrative career begin at your current institution?

( ) yes ( ) no

37. Did your higher education administrative career begin at the institution from which you earned your highest degree?

( ) yes ( ) no

38. In how many other institutions of higher education have you been employed as an administrator? \_\_\_\_\_

39. Did your initial employment at your current institution begin as a(n):

- ( ) faculty member only  
 ( ) administrator only  
 ( ) faculty member and administrator  
 ( ) adjunct faculty member only  
 ( ) graduate student assistant  
 ( ) graduate teaching/staff/research assistant  
 ( ) support staff  
 ( ) other (specify) \_\_\_\_\_



**Section IV - Personal Characteristics**

40. Age range:  
 30 or under  
 31 - 40  
 41 - 50  
 51 - 60  
 over 60

41. Race/Ethnic Origin:  
 American Indian/Native Alaskan  
 Black  
 Hispanic  
 Asian/Pacific Islander  
 White  
 Other

42. Marital status:  
 never married  
 married  
 separated  
 divorced  
 widowed

43. Please place the appropriate year beside each of the following milestones (leave the item blank if not applicable):

- married (first time) \_\_\_\_\_  
 divorced \_\_\_\_\_  
 widowed \_\_\_\_\_  
 first higher educational administrative position \_\_\_\_\_  
 current educational administrative position \_\_\_\_\_

44. Number of children \_\_\_\_\_

Identify the level of support you feel you received from significant others in attaining your current position (check all that apply):

- |   |   |   |   |
|---|---|---|---|
| 45. <input type="checkbox"/> spouse/<br>spouse role | <input type="checkbox"/> very supportive<br><input type="checkbox"/> supportive<br><input type="checkbox"/> not supportive<br><input type="checkbox"/> not applicable | 46. <input type="checkbox"/> children           | <input type="checkbox"/> very supportive<br><input type="checkbox"/> supportive<br><input type="checkbox"/> not supportive<br><input type="checkbox"/> not applicable |
| 47. <input type="checkbox"/> parents                | <input type="checkbox"/> very supportive<br><input type="checkbox"/> supportive<br><input type="checkbox"/> not supportive<br><input type="checkbox"/> not applicable | 48. <input type="checkbox"/> significant others | <input type="checkbox"/> very supportive<br><input type="checkbox"/> supportive<br><input type="checkbox"/> not supportive<br><input type="checkbox"/> not applicable |

Check your highest earned degree. Enter the major field of study and date for each degree.

	Major field of study	Year earned
49. <input type="checkbox"/> Bachelor's	_____	_____
50. <input type="checkbox"/> Master's	_____	_____
51. <input type="checkbox"/> Education Specialist	_____	_____
52. <input type="checkbox"/> Doctorate	_____	_____

If you would like to further describe how your career developed, please do so on a separate sheet of paper and return with the questionnaire.

Thank you again.

**MRA Program**  
**1890-000**



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NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

FIRST CLASS	BUSINESS REPLY MAIL PREMIT NO. 4509	ORLANDO FLA.
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POSTAGE WILL BE PAID BY ADDRESSEE

**Lynda A. Kuyper**  
**University of Central Florida**  
**Bldg 12 Room 220**  
**P.O. Box 25000**  
**Orlando, Fl 32816**



APPENDIX D  
LETTER TO PRESIDENTS

January 28, 1986

Dr. Helen Popovich, President  
Florida Atlantic University  
500 N.W. 20th Street  
Boca Raton, Florida 33431

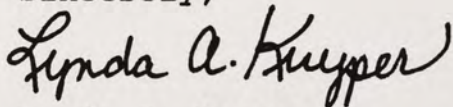
Dear Dr. Popovich:

Within the next few days I will be sending the enclosed letter and questionnaire to women in administrative positions at your institution. The purpose of the study is to determine the importance women in higher education administrative positions place on various contributors to their career development.

The information provided by the respondents from your institution will be pooled with that from respondents of other institutions and reported in aggregate form only. Neither your institution nor the individual respondent will be identified in the study. Of course, the results of the study will be available upon request.

If you have any questions or comments regarding my plans, please contact me.

Sincerely,



Lynda A. Kuyper  
Ed.D. Candidate  
Educational Administration  
and Supervision

Enclosures

APPENDIX E  
COMPLETE AND ABBREVIATED VERSION OF  
QUESTIONNAIRE ITEMS

TABLE 1  
 COMPLETE AND ABBREVIATED VERSION OF  
 QUESTIONNAIRE ITEMS

Item Number	Complete Item	Abbreviated Version
3	In achieving your present position, do you think your gender was:  Irrelevant Of little importance Somewhat important Very important	Gender  Irrelevant Little Impt Somewhat Impt Very Impt
4	Which statement best describes how you attained your present position.  Self-initiated application Approached by individual Approached by search committee Informally referred	Position Attainment  Application Approached Indiv Approached Com Referred
5	Are you the first female to hold this position?	First Female
7	To determine the level of your current position in the administrative hierarchy, please indicate how many administrative levels you must report through to the chief executive officer/president/provost.	Level
8	Type of institution in which you are employed.  Community College University	Institution  Com Col Univ
10	Affirmative Action Plan	Affirm Action

TABLE 1 (continued)

Item Number	Complete Item	Abbreviated Version
12	Influence of a mentor	Mentor
13	Formal administrative internship	Internship
14	Membership in professional organization(s)	Member
15	Leadership in professional organization(s)	Leader
16	Willingness to assume added responsibility	Responsibility
17	Interim assignment(s)	Interim
18	Willingness to relocate	Relocate
21	Committee appointments	Committees
24	Personnel administration skills	Personnel
25	Counseling skills	Counseling
26	Communication skills	Communication
28	Prior administrative experience	Admin Exp
29	Prior teaching experience	Teaching Exp
30	Prior administrative and teaching experience	Admin/Teach Exp
31	Informal female network	Inf Female Network
32	Informal male network	Inf Male Network
33	Formal female network	For Female Network
34	Formal male network	For Male Network

TABLE 1 (continued)

Item Number	Complete Item	Abbreviated Version
36	Did your higher education administrative career begin at your current institution?	Current Institution
37	Did your higher education administrative career begin at the institution from which you earned your highest degree?	Institution of Highest Degree
38	In how many other institutions of higher education have you been employed as an administrator?	Other Institutions
39	Did your initial employment at your current institution begin as a(n):	Initial Employment
	Faculty member only	Faculty
	Administrator only	Administrator
	Faculty member & administrator	Faculty/Admin
	Adjunct faculty member only	Adjunct Fac
	Graduate student assistant	Grad Student Asst
	Graduate teaching/staff/research assistant	Other Grad Asst
45-48	Identify the level of support you feel you received from significant others in attaining your current position.	Support of Significant Others

APPENDIX F  
DEMOGRAPHIC AND INFORMATIONAL  
CHARACTERISTICS OF SAMPLE



TABLE 3

DEMOGRAPHIC AND INFORMATIONAL  
CHARACTERISTICS OF SAMPLE\*

Characteristic	Response Percentages	
	N	%
<b>Gender</b>		
Irrelevant	141	41.7
Of Little Importance	85	25.1
Important	42	12.4
Somewhat Important	54	16.0
Very Important	15	4.4
<b>Position Attainment</b>		
Self Initiated	106	30.9
Approached	84	24.5
Approached Com	5	1.5
Nominated	13	3.8
Promoted	108	31.5
Informally Ref	14	4.1
Not Known	4	1.2
Other	8	2.6
<b>First Female</b>		
Yes	172	50.1
No	120	35.0
New Position	48	14.0
Do Not Know	3	0.9
<b>Level</b>		
First (President/Provost)	3	0.9
Second	42	12.2
Third	114	33.2
Fourth	125	36.4
Fifth	44	12.8
Sixth	13	3.8
Seventh	2	0.6
<b>Institution</b>		
Com Col	194	56.6
Univ	149	43.4
<b>Current Institution</b>		
Yes	221	64.8
No	120	35.2

TABLE 3 (continued)

Characteristic	Response Percentages	
	N	%
Institution of Highest Degree		
Yes	64	18.9
No	274	81.1
Other Institution		
None	224	65.5
One	71	20.8
Two	31	9.1
Three	9	2.6
Four	6	1.8
Five	1	0.3
Initial Employment		
Faculty	96	28.1
Administrator	99	28.9
Faculty/Administrator	38	11.1
Adjunct Faculty	15	4.4
Grad Student Asst	8	2.3
Other Grad Asst	5	1.5
Support Staff	59	17.3
Other	22	6.4
Age		
30 or Under	10	2.9
31-40	114	33.2
41-50	120	35.0
51-60	67	19.5
Over 60	32	9.3
Race		
American Indian/Native Alaskan	3	0.9
Black	48	14.0
Hispanic	10	2.9
Asian/Pacific Islander	2	0.6
White	280	81.6
Marital Status		
Never Married	47	13.9
Married	204	60.2
Separated	5	1.5
Divorced	68	20.1
Widowed	15	4.4

TABLE 3 (continued)

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Characteristic	Response Percentages	
	N	%
Highest Degree Earned		
No Degree	6	1.8
Bachelor's	56	16.3
Master's	132	38.5
Education Specialist	10	2.9
Doctorate	137	39.9

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\*Percentages Rounded

APPENDIX G  
SUMMARY INFORMATION  
LEVEL BY INSTITUTION

TABLE 6

CONTRIBUTING FACTOR: FORMAL EDUCATION  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A Unimportant Neither Impt nor Unimpt Important	2 100.0	1 100.0	3 100.0			
2	N/A Unimportant Neither Impt nor Unimpt Important	1 100.0 24 60.0	1 100.0 16 40.0	1 2.4 1 2.4 40 95.2	2.15	2	0.34
3	N/A Unimportant Neither Impt nor Unimpt Important	2 66.7 66 60.6	1 100.0 1 33.3 43 39.4	1 0.9 3 2.7 109 96.5	1.57	2	0.46

TABLE 6 (continued)

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
4	N/A				2.03	2	0.36
	Unimportant	1 100.0		1 0.8			
	Neither Impt nor Unimpt Important	66 54.5	55 45.5	121 98.4			
5	N/A				0.35	1	0.55
	Unimportant						
	Neither Impt nor Unimpt Important	20 47.6	22 52.4	42 95.5			
6	N/A				0.79	2	0.67
	Unimportant	1 100.0		1 7.7			
	Neither Impt nor Unimpt Important	1 50.0 7 70.0	1 50.0 3 30.0	2 15.4 10 76.9			
7	N/A						
	Unimportant		1 100.0	1 50.0			
	Neither Impt nor Unimpt Important	1 100.0		1 50.0			

\*Percentages Rounded

TABLE 7

CONTRIBUTING FACTOR: AFFIRM ACTION  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A						
	Unimportant	1 50.0	1 50.0	2 66.7			
	Neither Impt nor Unimpt	1 100.0		1 33.3			
	Important						
2	N/A	3 60.0	2 40.0	5 11.9	5.22	3	0.16
	Unimportant	7 58.3	5 41.7	12 28.6			
	Neither Impt nor Unimpt	10 83.3	2 16.7	12 28.6			
	Important	5 38.5	8 61.5	13 31.0			
3	N/A	12 66.7	6 33.3	18 16.2	1.11	3	0.78
	Unimportant	18 64.3	10 35.7	28 25.2			
	Neither Impt nor Unimpt	20 55.6	16 44.4	36 32.4			
	Important	16 55.2	13 44.8	29 26.1			

TABLE 7 (continued)

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
4	N/A	16 66.7	8 33.3	24 19.7	4.42	3	0.22
	Unimportant	22 61.1	14 38.9	36 29.5			
	Neither Impt nor Unimpt	9 39.1	14 60.9	23 18.9			
	Important	20 51.3	19 48.7	39 32.0			
5	N/A	3 50.0	3 50.0	6 13.6	0.75	3	0.86
	Unimportant	5 38.5	8 61.5	13 29.5			
	Neither Impt nor Unimpt	7 53.8	6 46.2	13 29.5			
	Important	5 41.7	7 58.3	12 27.3			
6	N/A	2 100.0		2 15.4	2.05	3	0.56
	Unimportant	2 50.0	2 50.0	4 30.8			
	Neither Impt nor Unimpt	4 66.7	2 33.3	6 46.2			
	Important	1 100.0		1 7.7			
7	N/A		1 100.0	1 50.0			
	Unimportant						
	Neither Impt nor Unimpt						
	Important	1 100.0		1 50.0			

\*Percentages Rounded



TABLE 8

CONTRIBUTING FACTOR: CHANCE  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A						
	Unimportant	2 100.0		2 66.7			
	Neither Impt nor Unimpt		1 100.0	1 33.3			
	Important						
-----							
2	N/A	9 69.2	4 30.8	13 31.0	2.28	3	0.52
	Unimportant	6 60.0	4 40.0	10 23.8			
	Neither Impt nor Unimpt	6 66.7	3 33.3	9 21.4			
	Important	4 40.0	6 60.0	10 23.8			
-----							
3	N/A	16 69.6	7 30.4	23 20.9	3.89	3	0.27
	Unimportant	17 47.2	19 52.8	36 32.7			
	Neither Impt nor Unimpt	20 66.7	10 33.3	30 27.3			
	Important	12 57.1	9 42.9	21 19.1			
-----							

TABLE 8 (continued)

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
4	N/A	16 64.0	9 36.0	25 20.8	5.45	3	0.14
	Unimportant	22 59.5	15 40.5	37 30.8			
	Neither Impt nor Unimpt	9 34.6	17 65.4	26 21.7			
	Important	18 56.3	14 43.8	32 26.7			
5	N/A	4 50.0	4 50.0	8 18.2	9.64	3	0.02
	Unimportant	14 63.6	8 36.4	22 50.0			
	Neither Impt nor Unimpt	2 28.6	5 71.4	7 15.9			
	Important		7 100.0	7 15.9			
6	N/A	2 100.0		2 15.4	4.95	3	0.18
	Unimportant		1 100.0	1 7.7			
	Neither Impt nor Unimpt	3 100.0		3 23.1			
	Important	4 57.1	3 42.9	7 53.8			
7	N/A		1 100.0	1 50.0			
	Unimportant Neither Impt nor Unimpt Important	1 100.0		1 50.0			

\*Percentages Rounded

TABLE 9

CONTRIBUTING FACTOR: MENTOR  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A Unimportant Neither Impt nor Unimpt Important	1 50.0	1 50.0	2 100.0			
2	N/A Unimportant Neither Impt nor Unimpt Important	5 71.4 4 50.0 3 60.0 12 57.1	2 28.6 4 50.0 2 40.0 9 42.9	7 17.1 8 19.5 5 12.2 21 51.2	0.74	3	0.86
3	N/A Unimportant Neither Impt nor Unimpt Important	11 64.7 6 46.2 16 80.0 30 52.6	6 35.3 7 53.8 4 20.0 27 47.4	17 15.9 13 12.1 20 18.7 57 53.3	5.71	3	0.13

TABLE 9 (continued)

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A	9	69.2	4	30.8	13	10.6	5.73	3	0.13
	Unimportant	11	42.3	15	57.7	26	21.1			
	Neither Impt nor Unimpt	19	70.4	8	29.6	27	22.0			
	Important	29	50.9	28	49.1	57	46.3			
5	N/A	2	28.6	5	71.4	7	15.9	4.59	3	0.20
	Unimportant	5	83.3	1	16.7	6	13.6			
	Neither Impt nor Unimpt	6	46.2	7	53.8	13	29.5			
	Important	7	38.9	11	61.1	18	40.9			
6	N/A	3	75.0	1	25.0	4	30.8	0.68	2	0.71
	Unimportant									
	Neither Impt nor Unimpt	1	100.0			1	7.7			
7	Important	5	62.5	3	37.5	8	61.5			
	Unimportant									
7	N/A									
	Neither Impt nor Unimpt	1	50.0	1	50.0	2	100.0			

\*Percentages Rounded

TABLE 10

CONTRIBUTING FACTOR: INTERNSHIP  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
1	N/A	1	50.0	1	50.0	2	66.7			
	Unimportant Neither Impt nor Unimpt Important	1	100.0			1	33.3			
2	N/A	13	56.5	10	43.5	23	56.1	0.18	3	0.98
	Unimportant	5	62.5	3	37.5	8	19.5			
	Neither Impt nor Unimpt	4	57.1	3	42.9	7	17.1			
	Important	2	66.7	1	33.3	3	7.3			
3	N/A	34	58.6	24	41.4	58	52.7	0.81	3	0.85
	Unimportant	11	55.0	9	45.0	20	18.2			
	Neither Impt nor Unimpt	10	62.5	6	37.5	16	14.5			
	Important	11	68.8	5	31.3	16	14.5			

TABLE 10 (continued)

Level	Response Category	Com Col		University		Marginals		X <sup>2</sup>	DF	Significance
		N	%	N	%	N	%			
4	N/A	32	65.3	17	34.7	49	40.5	9.28	3	0.03
	Unimportant	14	45.2	17	54.8	31	25.6			
	Neither Impt nor Unimpt	13	72.2	5	27.8	18	14.9			
	Important	8	34.8	15	65.2	23	19.9			
5	N/A	6	33.3	12	66.7	18	40.9	2.59	3	0.46
	Unimportant	7	63.6	4	36.4	11	25.0			
	Neither Impt nor Unimpt	4	44.4	5	55.6	9	20.5			
	Important	3	50.0	3	50.0	6	13.6			
6	N/A	3	60.0	2	40.0	5	41.7	2.10	3	0.55
	Unimportant	2	50.0	2	50.0	4	33.3			
	Neither Impt nor Unimpt	1	100.0			1	8.3			
	Important	2	100.0			2	16.7			
7	N/A			1	100.0	1	50.0			
	Unimportant	1	100.0			1	50.0			
	Neither Impt nor Unimpt									
	Important									

\*Percentages Rounded

TABLE 11

CONTRIBUTING FACTOR: MEMBER  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A						
	Unimportant	1 100.0		1 33.3	3.00	2	0.22
	Neither Impt nor Unimpt		1 100.0	1 33.3			
Important	1 100.0		1 33.3				
2	N/A	4 50.0	4 50.0	8 19.0	4.16	3	0.24
	Unimportant	7 50.0	7 50.0	14 33.3			
	Neither Impt nor Unimpt	8 88.9	1 11.1	9 21.4			
	Important	6 54.5	5 45.5	11 26.2			
3	N/A	11 64.7	6 35.3	17 15.0	0.64	3	0.88
	Unimportant	23 62.2	14 37.8	37 32.7			
	Neither Impt nor Unimpt	14 53.8	12 46.2	26 23.0			
	Important	20 60.6	13 39.4	33 29.2			

TABLE 11 (continued)

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
4	N/A	7 43.8	9 56.3	16 13.0	1.59	3	0.66
	Unimportant	26 53.1	23 39.8	49 39.8			
	Neither Impt nor Unimpt	10 52.6	9 47.4	19 15.4			
	Important	24 61.5	15 38.5	39 31.7			
5	N/A	1 16.7	5 83.3	6 14.0	2.56	3	0.46
	Unimportant	6 50.0	6 50.0	12 27.9			
	Neither Impt nor Unimpt	7 50.0	7 50.0	14 32.6			
	Important	6 54.5	5 45.5	11 25.6			
6	N/A	1 50.0	1 50.0	2 15.4	3.61	3	0.31
	Unimportant	2 50.0	2 50.0	4 30.8			
	Neither Impt nor Unimpt	5 100.0		5 38.5			
	Important	1 50.0	1 50.0	2 15.4			
7	N/A Unimportant Neither Impt nor Unimpt Important	1 50	1 50.0	2 100.0			

\*Percentages Rounded



TABLE 12

CONTRIBUTING FACTOR: LEADER  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
1	N/A									
	Unimportant	1	100.0			1	33.3			
	Neither Impt nor Unimpt									
	Important	1	50.0	1	50.0	2	66.7			
-----										
2	N/A	1	33.3	2	66.7	3	7.1	2.48	3	0.48
	Unimportant	5	50.0	5	50.0	10	23.8			
	Neither Impt nor Unimpt									
	Important	7	77.8	2	22.2	9	21.4			
-----										
3	N/A	10	62.5	6	37.5	16	14.3	1.36	3	0.71
	Unimportant	16	51.6	15	48.4	31	27.7			
	Neither Impt nor Unimpt									
	Important	15	60.0	10	40.0	25	22.3			
-----										

TABLE 12 (continued)

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
4	N/A	6 42.9	8 57.1	14 11.4	1.07	3	0.78
	Unimportant	24 54.5	20 45.5	44 35.8			
	Neither Impt nor Unimpt	15 60.0	10 40.0	25 20.3			
	Important	22 55.0	18 45.0	40 32.5			
5	N/A	1 16.7	5 83.3	6 13.6	5.84	3	0.12
	Unimportant	6 46.2	7 53.8	13 29.5			
	Neither Impt nor Unimpt	8 72.7	3 27.3	11 25.0			
	Important	5 35.7	9 64.3	14 31.8			
6	N/A		1 100.0	1 7.7	4.24	3	0.24
	Unimportant	3 60.0	2 40.0	5 38.5			
	Neither Impt nor Unimpt	4 100.0		4 30.8			
	Important	2 66.7	1 33.3	3 23.1			
7	N/A		1 100.0	1 50.0			
	Unimportant Neither Impt nor Unimpt Important	1 100.0		1 50.0			

\*Percentages Rounded

TABLE 13

CONTRIBUTING FACTOR: RESPONSIBILITY  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A Unimportant Neither Impt nor Unimpt Important	2 66.7	1 33.3	3 100.0			
2	N/A Unimportant Neither Impt nor Unimpt Important	1 100.0		1 2.4			
		24 58.5	17 41.5	41 97.6			
3	N/A Unimportant Neither Impt nor Unimpt Important	2 100.0 1 33.3	2 66.7	2 1.8 3 2.7	3.72	3	0.29
		5 83.3 58 58.0	1 16.7 42 42.0	6 5.4 100 90.1			

TABLE 13 (continued)

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A	2	50.0	2	50.0	4	3.2	1.42	3	0.70
	Unimportant	3	75.0	1	25.0	4	3.2			
	Neither Impt nor Unimpt	3	75.0	1	25.0	4	3.2			
	Important	60	53.6	52	46.4	112	90.3			
-----										
5	N/A			1	100.0	1	2.3	2.68	3	0.44
	Unimportant			2	100.0	2	4.5			
	Neither Impt nor Unimpt	1	50.0	1	50.0	2	4.5			
	Important	19	48.7	20	51.3	39	88.6			
-----										
6	N/A									
	Unimportant Neither Impt nor Unimpt Important	9	69.2	4	30.8	13	100.0			
-----										
7	N/A									
	Unimportant Neither Impt nor Unimpt Important	1	50.0	1	50.0	2	100.0			

\*Percentages Rounded

TABLE 14

CONTRIBUTING FACTOR: INTERIM  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A	1 100.0		1 33.3			
	Unimportant Neither Impt nor Unimpt Important	1 50.0	1 50.0	2 66.7			
2	N/A	6 54.5	5 45.5	11 26.8	0.87	3	0.83
	Unimportant	1 100.0		1 2.4			
	Neither Impt nor Unimpt	2 66.7	1 33.3	3 7.3			
	Important	15 57.7	11 42.3	26 63.4			
3	N/A	24 61.5	15 38.5	39 35.5	0.31	3	0.96
	Unimportant	7 63.6	4 36.4	11 10.0			
	Neither Impt nor Unimpt	7 53.8	6 46.2	13 11.8			
	Important	28 59.6	19 40.4	47 42.7			

TABLE 14 (continued)

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A	19	55.9	15	44.1	34	28.1	3.14	3	0.37
	Unimportant	10	45.5	12	54.5	22	18.2			
	Neither Impt nor Unimpt	5	38.5	8	61.5	13	10.7			
	Important	32	61.5	20	38.5	52	43.0			
5	N/A	4	50.0	4	50.0	8	18.2	1.45	3	0.69
	Unimportant	3	37.5	5	62.5	8	18.2			
	Neither Impt nor Unimpt	5	62.5	3	37.5	8	18.2			
	Important	8	40.0	12	60.0	20	45.5			
6	N/A			1	100.0	1	7.7	5.85	3	0.11
	Unimportant	1	33.3	2	66.7	3	23.1			
	Neither Impt nor Unimpt	2	100.0			2	15.4			
	Important	6	85.7	1	14.3	7	53.8			
7	N/A	1	50.0			1	50.0			
	Unimportant Neither Impt nor Unimpt Important			1	50.0	1	50.0			

\*Percentages Rounded

TABLE 15

CONTRIBUTING FACTOR: RELOCATE  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A Unimportant Neither Impt nor Unimpt Important	2 66.7	1 33.3	3 100.0			
2	N/A Unimportant Neither Impt nor Unimpt Important	14 60.9 2 50.0 2 40.0 7 70.0	9 39.1 2 50.0 3 60.0 3 30.0	23 54.8 4 9.5 5 11.9 10 23.8	1.41	3	0.70
3	N/A Unimportant Neither Impt nor Unimpt Important	32 57.1 3 27.3 12 80.0 19 65.5	24 42.9 8 72.7 3 20.0 10 34.5	56 50.5 11 9.9 15 13.5 29 26.1	7.92	3	0.05

TABLE 15 (continued)

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A	37	57.8	27	42.2	64	52.5	3.96	3	0.27
	Unimportant	4	30.8	9	69.2	13	10.7			
	Neither Impt nor Unimpt	7	46.7	8	53.3	15	12.3			
	Important	18	60.0	12	40.0	30	24.6			
5	N/A	9	50.0	9	50.0	18	41.9	0.47	3	0.93
	Unimportant	4	40.0	6	60.0	10	23.3			
	Neither Impt nor Unimpt	3	42.9	4	57.1	7	16.3			
	Important	3	37.5	5	62.5	8	18.6			
6	N/A	5	71.4	2	28.6	7	53.8	3.16	3	0.37
	Unimportant	1	33.3	2	66.7	3	23.1			
	Neither Impt nor Unimpt	1	100.0			1	7.7			
	Important	2	100.0			2	15.4			
7	N/A			1	100.0	1	50.0			
	Neither Impt nor Unimpt Important	1	100.0			1	50.0			

\*Percentages Rounded



TABLE 16

CONTRIBUTING FACTOR: RESUME  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A Unimportant Neither Impt nor Unimpt Important	2 66.7	1 33.3	3 100.0			
2	N/A Unimportant Neither Impt nor Unimpt Important	5 71.4 3 60.0 4 66.7 12 52.2	2 28.6 2 40.0 2 33.3 11 47.8	7 17.1 5 12.7 6 14.6 23 56.1	1.03	3	0.79
3	N/A Unimportant Neither Impt nor Unimpt Important	11 68.6 6 40 15 71.4 34 57.6	5 31.3 9 60.0 6 28.6 25 42.4	16 14.4 15 13.5 21 18.9 59 53.2	4.26	3	0.24

TABLE 16 (continued)

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
4	N/A	18 66.7	9 33.3	27 22.1	1.98	3	0.58
	Unimportant	8 50.0	8 50.0	16 13.1			
	Neither Impt nor Unimpt	7 50.0	7 50.0	14 11.5			
	Important	34 52.3	31 47.7	65 53.3			
5	N/A	1 16.7	5 83.3	6 14.0	4.27	3	0.48
	Unimportant	3 60.0	2 40.0	5 11.6			
	Neither Impt nor Unimpt	4 44.4	5 55.6	9 20.9			
	Important	11 47.8	12 52.2	23 53.5			
6	N/A						
	Unimportant	2 66.7	1 33.3	3 25.0			
	Neither Impt nor Unimpt	2 100.0		2 16.7			
	Important	5 71.4	2 28.6	7 58.3			
7	N/A						
	Unimportant Neither Impt nor Unimpt						
	Important	1 50.0	1 50.0	2 100.0			

\*Percentages Rounded

TABLE 17

CONTRIBUTING FACTOR: TIMING  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
1	N/A									
	Unimportant Neither Impt nor Unimpt Important	1	66.7	1	33.3	3	100.0			
2	N/A	6	85.7	1	14.3	7	16.7	3.14	3	0.37
	Unimportant	2	66.7	1	33.7	3	7.1			
	Neither Impt nor Unimpt	1	33.3	2	66.7	3	7.1			
	Important	16	55.2	13	44.8	29	69.0			
3	N/A	3	75.0	1	25.0	4	3.6	7.23	3	0.07
	Unimportant	3	42.9	4	57.1	7	6.3			
	Neither Impt nor Unimpt	2	22.2	7	77.8	9	8.0			
	Important	59	64.1	33	35.9	92	82.1			

TABLE 17 (continued)

Level	Response Category	Com Col N	%	University N	%	Marginals N	%	X <sup>2</sup>	DF	Significance
4	N/A	3	75.0	1	25.0	4	3.3	0.68	3	0.87
	Unimportant	3	50.0	3	50.0	6	4.9			
	Neither Impt nor Unimpt	4	57.1	3	42.9	7	5.7			
	Important	58	55.2	47	44.8	105	86.1			
5	N/A	1	25.0	3	75.0	4	9.3	1.98	3	0.58
	Unimportant	1	100.0			1	2.3			
	Neither Impt nor Unimpt	4	50.0	4	50.0	8	18.6			
	Important	13	43.3	17	56.7	30	69.8			
6	N/A									
	Unimportant									
	Neither Impt nor Unimpt	2	66.7	1	33.3	3	23.1			
	Important	7	70.0	3	30.0	10	76.9			
7	N/A									
	Unimportant	1	100.0			1	50.0			
	Neither Impt nor Unimpt									
	Important			1	100.0	1	50.0			

\*Percentages Rounded

TABLE 18

CONTRIBUTING FACTOR: COMMITTEES  
 LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col		University		Marginals		X <sup>2</sup>	DF	Significance
		N	%	N	%	N	%			
1	N/A									
	Unimportant Neither Impt nor Unimpt Important			1	100.0	1	33.3			
		2	100.0			2	66.7			
2	N/A	6	60.0	4	40.0	10	24.4	0.02	3	1.00
	Unimportant	4	57.1	3	42.9	7	17.1			
	Neither Impt nor Unimpt	4	57.1	3	42.9	7	17.1			
	Important	10	58.8	7	41.2	17	41.5			
3	N/A	21	75.0	7	25.0	28	25.2	8.43	3	0.04
	Unimportant	8	40.0	12	60.0	20	18.0			
	Neither Impt nor Unimpt	7	43.8	9	56.3	16	14.4			
	Important	31	66.0	16	34.0	47	42.3			

TABLE 18 (continued)

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
4	N/A	16 59.3	11 40.7	27 22.1	1.07	3	0.79
	Unimportant	17 60.7	11 39.3	28 23.0			
	Neither Impt nor Unimpt	14 50.0	14 50.0	28 23.0			
	Important	20 51.3	19 48.7	39 32.0			
5	N/A	1 20.0	4 80.0	5 11.4	1.74	3	0.63
	Unimportant	3 50.0	3 50.0	6 13.6			
	Neither Impt nor Unimpt	8 53.3	7 46.7	15 34.1			
	Important	8 44.4	10 55.6	18 40.9			
6	N/A	1 50.0	1 50.0	2 16.7	3.75	3	0.29
	Unimportant	1 33.3	2 66.7	3 25.0			
	Neither Impt nor Unimpt	4 100.0		4 33.3			
	Important	2 66.7	1 33.3	3 25.0			
7	N/A Unimportant Neither Impt nor Unimpt Important	1 50.0	1 50.0	2 100.0			

\*Percentages Rounded

TABLE 19

CONTRIBUTING FACTOR: RESEARCH  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A Unimportant	1 50.0	1 50.0	2 66.7			
	Neither Impt nor Unimpt Important	1 100.0		1 33.3			
2	N/A	10 66.7	5 33.3	15 35.7	1.71	3	0.64
	Unimportant	4 57.1	3 42.9	7 16.7			
	Neither Impt nor Unimpt	6 46.2	7 53.8	13 31.0			
	Important	5 71.4	2 28.6	7 16.7			
3	N/A	24 64.9	13 35.1	37 33.3	5.61	3	0.13
	Unimportant	18 60.0	12 40.0	30 27.0			
	Neither Impt nor Unimpt	15 75.0	5 25.0	20 18.0			
	Important	10 41.7	14 58.3	24 21.6			

TABLE 19 (continued)

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
4	N/A	26 66.7	13 33.3	39 32.2	6.15	3	0.11
	Unimportant	20 55.6	16 44.4	36 29.8			
	Neither Impt nor Unimpt	14 56.0	11 44.0	25 20.7			
	Important	7 33.3	14 66.7	21 17.4			
5	N/A	7 50.0	7 50.0	14 31.8	3.35	3	0.34
	Unimportant	5 55.6	4 44.4	9 20.5			
	Neither Impt nor Unimpt	7 50.0	7 50.0	14 31.8			
	Important	1 14.3	6 85.7	7 15.9			
6	N/A	4 80.0	1 20.0	5 38.5	4.55	3	0.21
	Unimportant	2 50.0	2 50.0	4 30.8			
	Neither Impt nor Unimpt	3 100.0		3 23.1			
	Important		1 100.0	1 7.7			
7	N/A	1 100.0		1 50.0			
	Unimportant Neither Impt nor Unimpt Important		1 100.0	1 50.0			

\*Percentages Rounded



TABLE 20

CONTRIBUTING FACTOR: PUBLICATIONS  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A						
	Unimportant	1 100.0		1 33.3	3.00	2	0.22
	Neither Impt nor Unimpt		1 100.0	1 33.3			
Important	1 100.0		1 33.3				
2	N/A	10 66.7	5 33.3	15 35.7	1.68	3	0.64
	Unimportant	4 50.0	4 50.0	8 19.0			
	Neither Impt nor Unimpt	8 66.7	4 33.3	12 28.6			
	Important	3 42.9	4 57.1	7 16.7			
3	N/A	25 69.4	11 30.6	36 32.4	5.97	3	0.11
	Unimportant	19 57.6	14 42.4	33 29.7			
	Neither Impt nor Unimpt	14 66.7	7 33.3	21 18.9			
	Important	8 38.1	13 61.9	21 18.9			

TABLE 20 (continued)

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A	25	65.8	13	34.2	38	31.9	4.32	3	0.23
	Unimportant	15	46.9	17	53.1	32	26.9			
	Neither Impt nor Unimpt	15	55.6	12	44.4	27	22.7			
	Important	9	40.9	13	59.1	22	18.5			
5	N/A	5	55.6	4	44.4	9	20.9	4.01	3	0.26
	Unimportant	7	63.6	4	36.4	11	25.6			
	Neither Impt nor Unimpt	4	33.3	8	66.7	12	27.9			
	Important	3	27.3	8	72.7	11	25.6			
6	N/A	5	83.3	1	16.7	6	46.2	6.74	3	0.08
	Unimportant	1	50.0	1	50.0	2	15.4			
	Neither Impt nor Unimpt	3	100.0			3	23.1			
	Important			1	100.0	1	15.4			
7	N/A			1	100.0	1	50.0			
	Unimportant Neither Impt nor Unimpt Important	1	100.0			1	50.0			

\*Percentages Rounded

TABLE 21

CONTRIBUTING FACTOR: PERSONNEL  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A Unimportant Neither Impt nor Unimpt Important	2 66.7	1 33.3	3 100.0			
2	N/A Unimportant Neither Impt nor Unimpt Important	2 66.7 21 60.0	1 33.3 14 40.0	3 7.1 1 2.4 3 7.1 35 83.3	1.60	3	0.66
3	N/A Unimportant Neither Impt nor Unimpt Important	3 60.0 2 40.0 57 61.3	2 40.0 3 60.0 36 38.7	5 4.5 5 4.5 8 7.2 93 83.8	0.92	3	0.82

TABLE 21 (continued)

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A			2	100.0	2	1.6	5.15	3	0.16
	Unimportant	5	50.0	5	50.0	10	8.1			
	Neither Impt nor Unimpt	10	76.9	3	23.1	13	10.5			
	Important	53	53.5	46	46.5	99	79.8			
-----										
5	N/A	1	50.0	1	50.0	2	4.5	0.23	3	0.97
	Unimportant	2	50.0	2	50.0	4	9.1			
	Neither Impt nor Unimpt	1	33.3	2	66.7	3	6.8			
	Important	16	45.7	19	54.7	35	79.5			
-----										
6	N/A	1	100.0			1	7.7			
	Unimportant Neither Impt nor Unimpt Important	8	66.7	4	33.3	12	92.3			
-----										
7	N/A			1	100.0	1	50.0			
	Unimportant Neither Impt nor Unimpt Important	1	100.0			1	50.0			

\*Percentages Rounded

TABLE 22

CONTRIBUTING FACTOR: COUNSELING  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A Unimportant	1 50.0	1 50.0	2 66.7			
	Neither Impt nor Unimpt Important	1 100.0		1 33.3			
2	N/A	3 75.0	1 25.0	4 9.5	1.26	3	0.74
	Unimportant	1 33.3	2 66.7	3 7.1			
	Neither Impt nor Unimpt	6 60.0	4 40.0	10 23.8			
	Important	15 60.0	10 40.0	25 59.5			
3	N/A	7 43.8	9 56.3	16 14.4	7.27	3	0.06
	Unimportant	6 54.5	5 45.5	11 9.9			
	Neither Impt nor Unimpt	10 43.5	13 56.5	23 20.7			
	Important	43 70.5	18 29.5	61 55.0			

TABLE 22 (continued)

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A	6	60.0	4	40.0	10	8.1	4.80	3	0.19
	Unimportant	7	46.7	8	53.3	15	12.2			
	Neither Impt nor Unimpt	17	73.9	6	26.1	23	18.7			
	Important	37	49.3	38	50.7	75	61.0			
5	N/A			1	100.0	1	2.3	1.10	3	0.78
	Unimportant	1	33.3	2	66.7	3	6.8			
	Neither Impt nor Unimpt	5	45.5	6	54.5	11	25.0			
	Important	14	48.3	15	57.7	29	65.9			
6	N/A							3.14	2	0.21
	Unimportant	2	100.0			2	15.4			
	Neither Impt nor Unimpt			1	100.0	1	7.7			
	Important	7	70.0	3	30.0	10	76.9			
7	N/A			1	100.0	1	50.0			
	Neither Impt nor Unimpt									
	Important	1	100.0			1	50.0			

\*Percentages Rounded

TABLE 23

CONTRIBUTING FACTOR: COMMUNICATION  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
1	N/A Unimportant Neither Impt nor Unimpt Important	2	66.7	1	33.3	3	100.0			
2	N/A Unimportant Neither Impt nor Unimpt Important	1	100.0			1	2.4			
		24	58.5	17	41.5	41	97.6			
3	N/A Unimportant Neither Impt nor Unimpt Important	1	100.0	1	100.0	1	0.9	2.17	2	0.34
		67	60.4	44	39.6	111	98.2			

TABLE 23 (continued)

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A			2	100.0	2	1.6	4.08	3	0.25
	Unimportant	1	25.0	3	75.0	4	3.2			
	Neither Impt nor Unimpt	1	50.0	1	50.0	2	1.6			
	Important	66	56.9	50	43.1	116	93.5			
5	N/A			1	100.0	1	2.3	2.46	2	0.29
	Unimportant									
	Neither Impt nor Unimpt	1	20.0	4	80.0	5	11.4			
	Important	19	50.0	19	50.0	38	86.4			
6	N/A									
	Unimportant Neither Impt nor Unimpt Important	9	69.2	4	30.8	13	100.0			
7	N/A			1	100.0	1	50.0			
	Unimportant Neither Impt nor Unimpt Important	1	100.0			1	50.0			

\*Percentages Rounded



TABLE 24

CONTRIBUTING FACTOR: COMMUNITY RELATIONS  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
1	N/A Unimportant Neither Impt nor Unimpt Important	2	66.7	1	33.3	3	100.0			
2	N/A Unimportant Neither Impt nor Unimpt Important	1 2 22	33.3 66.7 61.1	2 1 14	66.7 33.3 38.9	3 3 36	7.1 7.1 85.7	0.96	2	0.62
3	N/A Unimportant Neither Impt nor Unimpt Important	5 10 11 42	71.4 55.6 55.0 61.8	2 8 9 26	28.6 44.4 45.0 38.2	7 18 20 68	6.2 15.9 17.7 60.2	0.83	3	0.84

TABLE 24 (continued)

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A	6	60.4	4	40.0	10	8.1	1.53	3	0.68
	Unimportant	6	40.0	9	60.0	15	12.2			
	Neither Impt nor Unimpt	17	54.8	14	45.2	31	25.2			
	Important	38	56.7	29	43.3	67	54.5			
5	N/A	2	50.0	2	50.0	4	9.1	3.14	3	0.37
	Unimportant	1	16.7	5	83.3	6	13.6			
	Neither Impt nor Unimpt	4	66.7	2	33.3	6	13.6			
	Important	13	46.4	15	53.6	28	63.6			
6	N/A	1	100.0			1	7.7	0.48	2	0.79
	Unimportant	2	66.7	1	33.3	3	23.1			
	Neither Impt nor Unimpt									
	Important	6	66.7	3	33.3	9	69.2			
7	N/A									
	Unimportant Neither Impt nor Unimpt Important	1	100.01	1	100.0	1	100.0			

\*Percentages Rounded

TABLE 25

CONTRIBUTING FACTOR: ADMIN EXP  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
1	N/A Unimportant Neither Impt nor Unimpt Important	2	66.7	1	33.3	3	100.0			
2	N/A Unimportant Neither Impt nor Unimpt Important	1 1 2 21	100.0 33.3 100.0 58.3	2 2 15	66.7 41.7	1 3 2 36	2.4 7.1 4.8 85.7	2.92	3	0.41
3	N/A Unimportant Neither Impt nor Unimpt Important	6 5 9 47	75.0 55.6 52.9 60.3	2 4 8 31	25.0 44.4 47.1 39.7	8 9 17 78	7.1 8.0 15.2 69.6	1.18	3	0.76

TABLE 25 (continued)

Level	Response Category	Com Col N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A	7	70.0	3	30.0	10	8.1	8.41	3	0.04
	Unimportant	8	57.1	6	42.9	14	11.4			
	Neither Impt nor Unimpt	12	57.1	2	14.3	14	11.4			
	Important	40	47.1	45	52.9	85	69.1			
-----										
5	N/A	3	75.0	1	25.0	4	9.5	3.45	3	0.33
	Unimportant	2	50.0	2	50.0	4	9.5			
	Neither Impt nor Unimpt	1	16.7	5	83.3	6	14.3			
	Important	12	42.9	16	57.1	28	66.7			
-----										
6	N/A							1.26	2	0.53
	Unimportant	1	50.0	1	50.0	2	15.4			
	Neither Impt nor Unimpt	2	100.0			2	15.4			
	Important	6	66.7	3	33.3	9	69.2			
-----										
7	N/A									
	Unimportant	1	100.0			1	50.0			
	Neither Impt nor Unimpt Important			1	100.0	1	50.0			

\*Percentages Rounded

TABLE 26

CONTRIBUTING FACTOR: TEACHING EXP  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A Unimportant Neither Impt nor Unimpt Important	2 66.7	1 33.3	3 100.0			
2	N/A Unimportant Neither Impt nor Unimpt Important	4 4 5 12 50.0 44.4 55.6 75.0	4 5 4 4 50.0 55.6 44.4 25.0	8 9 9 16 19.0 21.4 21.4 38.1	2.80	3	0.42
3	N/A Unimportant Neither Impt nor Unimpt Important	10 10 13 32 43.5 55.6 56.5 69.6	13 8 10 14 56.5 44.4 43.5 30.4	23 18 23 46 20.9 16.4 20.9 41.8	4.56	3	0.21

TABLE 26 (continued)

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A	13	54.2	11	45.8	24	19.8	1.23	3	0.75
	Unimportant	13	65.0	7	35.0	20	16.5			
	Neither Impt nor Unimpt	7	46.7	8	53.3	15	12.4			
	Important	34	54.8	28	45.2	62	51.2			
5	N/A	3	37.5	5	62.5	8	18.6	1.74	3	0.63
	Unimportant	1	50.0	1	50.0	2	4.7			
	Neither Impt nor Unimpt	2	28.6	5	71.4	7	16.3			
	Important	14	53.8	12	46.2	26	60.5			
6	N/A			4	100.0	4	30.8	13.00	2	0.001
	Unimportant									
	Neither Impt nor Unimpt	5	100.0			5	38.5			
	Important	4	100.0			4	30.8			
7	N/A			1	100.0	1	50.0			
	Unimportant									
	Neither Impt nor Unimpt									
	Important	1	100.0			1	50.0			

\*Percentages Rounded

TABLE 27

CONTRIBUTING FACTOR: ADMIN/TEACH EXP  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A Unimportant Neither Impt nor Unimpt Important	2 66.7	1 33.3	3 100.0			
2	N/A Unimportant Neither Impt nor Unimpt Important	4 66.7 2 40.0 7 77.8 12 57.1	2 33.3 3 60.0 2 22.2 9 42.9	6 14.6 5 12.2 9 22.0 21 51.2	2.20	3	0.53
3	N/A Unimportant Neither Impt nor Unimpt Important	11 52.4 7 53.8 8 42.1 38 70.4	10 47.6 6 46.2 11 57.9 16 29.6	21 19.6 13 12.1 19 17.8 54 50.5	5.66	3	0.13

TABLE 27 (continued)

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A	16	59.3	11	40.7	26	22.1	5.77	3	0.12
	Unimportant	13	76.5	4	23.5	17	13.9			
	Neither Impt nor Unimpt	5	35.7	9	64.3	14	11.5			
	Important	33	51.6	31	48.4	64	52.5			
5	N/A	2	33.3	4	66.7	6	13.6	1.81	3	0.61
	Unimportant	4	66.7	2	33.3	6	13.6			
	Neither Impt nor Unimpt	2	33.3	4	66.7	6	13.6			
	Important	12	46.2	14	53.8	26	59.1			
6	N/A			1	100.0	1	7.7	3.95	3	0.27
	Unimportant	1	50.0	1	50.0	2	15.4			
	Neither Impt nor Unimpt	3	100.0			3	23.1			
	Important	5	71.4	2	28.6	7	53.8			
7	N/A	1	100.0			1	50.0			
	Unimportant Neither Impt nor Unimpt Important			1	100.0	1	50.0			

\*Percentages Rounded



TABLE 28

CONTRIBUTING FACTOR: INF FEMALE NETWORK  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A						
	Unimportant Neither Impt nor Unimpt Important	1 100.0 1 50.0	1 50.0	1 33.3 2 66.7			
2	N/A	8 72.7	3 27.3	11 26.8	4.05	3	0.26
	Unimportant Neither Impt nor Unimpt Important	1 33.3 8 72.7 7 43.8	2 66.7 3 27.3 9 56.3	3 7.3 11 26.8 16 39.0			
3	N/A	19 63.3	11 36.7	30 27.0	0.75	3	0.86
	Unimportant Neither Impt nor Unimpt Important	15 60.0 12 63.2 20 55.1	10 40.0 7 36.8 17 45.9	25 22.5 19 17.1 27 33.3			

TABLE 28 (continued)

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A	24	58.5	17	41.5	41	33.9	0.70	3	0.87
	Unimportant	17	51.5	16	48.5	33	27.3			
	Neither Impt nor Unimpt	9	50.0	9	50.0	18	14.9			
	Important	17	58.6	12	41.4	29	24.0			
5	N/A	6	50.0	6	50.0	12	27.9	0.27	3	0.97
	Unimportant	4	40.0	6	60.0	10	23.3			
	Neither Impt nor Unimpt	6	46.2	7	53.8	13	30.2			
	Important	4	50.0	4	50.0	8	18.6			
6	N/A	2	66.7	1	33.3	3	23.1	1.42	3	0.70
	Unimportant	2	50.0	2	50.0	4	30.8			
	Neither Impt nor Unimpt	1	100.0			1	7.7			
	Important	4	80.0	1	20.0	5	38.5			
7	N/A									
	Unimportant									
7	Neither Impt nor Unimpt	1	100.0			1	50.0			
	Important			1	100.0	1	50.0			

\*Percentages Rounded

TABLE 29

CONTRIBUTING FACTOR: INF MALE NETWORK  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
1	N/A Unimportant Neither Impt nor Unimpt Important	2 66.7	1 33.3	3 100.0			
2	N/A Unimportant Neither Impt nor Unimpt Important	8 80.0 2 33.3 7 87.5 7 41.2	2 20.0 4 66.7 1 12.5 10 58.8	10 24.4 6 14.6 8 19.5 17 41.5	8.34	3	0.04
3	N/A Unimportant Neither Impt nor Unimpt Important	21 65.6 13 52.0 15 68.2 15 51.7	11 34.4 12 48.0 7 31.8 14 48.3	32 29.6 25 23.1 22 20.4 29 26.9	2.49	3	0.48

TABLE 29 (continued)

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A	24	57.1	18	42.9	42	34.4	6.52	3	0.09
	Unimportant	12	38.7	19	61.3	31	25.4			
	Neither Impt nor Unimpt	9	47.4	10	52.6	19	15.6			
	Important	21	70.0	9	30.0	30	24.6			
5	N/A	8	53.3	7	46.7	15	38.5	1.01	3	0.80
	Unimportant	3	37.5	5	62.5	8	20.5			
	Neither Impt nor Unimpt	4	40.0	6	60.0	10	25.6			
	Important	2	33.3	4	66.7	6	15.4			
6	N/A	3	75.0	1	25.0	4	30.8	1.50	3	0.68
	Unimportant	3	60.0	2	40.0	5	38.5			
	Neither Impt nor Unimpt	1	50.0	1	50.0	2	15.4			
	Important	2	100.0			2	15.4			
7	N/A Unimportant Neither Impt nor Unimpt Important	1	100.0			1	100.0			

\*Percentages Rounded

TABLE 30

CONTRIBUTING FACTOR: FOR FEMALE NETWORK  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N	%	University N	%	Marginals N	%	X <sup>2</sup>	DF	Significance
1	N/A									
	Unimportant Neither Impt nor Unimpt Important	1	100.0	1	50.0	1	33.3			
2	N/A	8	53.3	7	46.7	15	37.5	2.29	3	0.52
	Unimportant Neither Impt nor Unimpt Important	5	45.5	6	54.5	11	27.5			
3	N/A	28	63.6	16	36.4	44	40.0	1.58	3	0.66
	Unimportant Neither Impt nor Unimpt Important	16	55.2	13	44.8	29	26.4			

TABLE 30 (continued)

Level	Response Category	Com N	Col %	University N	University %	Marginals N	Marginals %	X <sup>2</sup>	DF	Significance
4	N/A	33	63.5	19	36.5	52	42.6	3.40	3	0.34
	Unimportant	17	44.7	21	55.3	38	31.1			
	Neither Impt nor Unimpt	11	50.0	11	50.0	22	18.0			
	Important	5	50.0	5	50.0	10	8.2			
5	N/A	9	60.0	6	40.0	15	34.9	1.84	3	0.61
	Unimportant	6	42.9	8	57.1	14	32.6			
	Neither Impt nor Unimpt	4	36.4	7	63.6	11	25.6			
	Important	1	33.3	2	66.7	3	7.0			
6	N/A	2	66.7	1	33.3	3	23.1	0.72	3	0.87
	Unimportant	3	60.0	2	40.0	5	38.5			
	Neither Impt nor Unimpt	3	75.0	1	25.0	4	30.8			
	Important	1	100.0			1	7.7			
7	N/A Unimportant Neither Impt nor Unimpt Important	1	100.0			1	100.0			

\*Percentages Rounded

TABLE 31

CONTRIBUTING FACTOR: FOR MALE NETWORK  
LEVEL BY INSTITUTION/SUMMARY INFORMATION\*

Level	Response Category	Com Col N	%	University N	%	Marginals N	%	X <sup>2</sup>	DF	Significance
1	N/A									
	Unimportant	1	100.0			1	33.3			
	Neither Impt nor Unimpt Important	1	50.0	1	50.0	2	66.7			
-----										
2	N/A	9	56.3	7	43.8	16	40.0	1.38	3	0.71
	Unimportant	5	50.0	5	50.0	10	25.0			
	Neither Impt nor Unimpt	6	75.0	2	25.0	8	20.0			
	Important	3	50.0	3	50.0	6	15.0			
-----										
3	N/A	25	64.1	14	35.9	39	36.1	2.73	3	0.44
	Unimportant	13	50.0	13	50.0	26	24.1			
	Neither Impt nor Unimpt	17	68.0	8	32.0	25	23.1			
	Important	9	50.0	9	50.0	18	16.7			
-----										

TABLE 31 (continued)

Level	Response Category	Com Col N %	University N %	Marginals N %	X <sup>2</sup>	DF	Significance
4	N/A	36 64.3	20 35.7	56 45.9	5.61	3	0.13
	Unimportant	13 39.4	20 60.6	33 27.0			
	Neither Impt nor Unimpt	9 47.4	10 52.6	19 15.6			
	Important	8 57.1	6 42.9	14 11.5			
5	N/A	10 62.5	6 37.5	16 37.2	4.60	3	0.20
	Unimportant	5 38.5	8 61.5	13 30.2			
	Neither Impt nor Unimpt	5 45.5	6 54.5	11 25.6			
	Important		3 100.0	3 7.0			
6	N/A	3 75.0	1 25.0	4 30.8	0.87	3	0.83
	Unimportant	4 66.7	3 33.3	6 46.2			
	Neither Impt nor Unimpt	1 50.0	1 50.0	2 15.4			
	Important	1 100.0		1 7.7			
7	N/A Unimportant Neither Impt nor Unimpt Important	1 100.0		1 100.0			

\*Percentages Rounded



APPENDIX H  
SUMMARY DATA  
ANALYSIS BY AGE

TABLE 35  
 CONTRIBUTING FACTOR: FORMAL EDUCATION  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	≤30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A									1	100.0	1	0.3
Unimportant			1	25.0	2	50.0	1	25.0			4	1.2
Neither Impt nor Unimpt			2	22.2	5	55.6	2	22.2			9	2.6
Important	10	3.1	110	33.7	111	34.0	64	19.6	31	9.5	326	95.9

\*Percentages Rounded

$\chi^2 = 13.21$

DF = 12

P = 0.35

TABLE 36  
 CONTRIBUTING FACTOR: AFFIRM ACTION  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	≤30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	2	3.6	11	19.6	18	32.1	13	23.2	12	21.4	56	16.6
Unimportant	1	1.1	35	36.8	36	37.9	13	13.7	10	10.5	95	28.2
Neither Impt nor Unimpt	3	3.3	30	33.0	27	29.7	23	25.3	8	8.8	91	27.0
Important	4	4.2	37	38.9	36	37.9	17	17.9	1	1.1	95	28.2

\*Percentages Rounded

$X^2 = 27.34$

DF = 12

P = 0.01

TABLE 37  
 CONTRIBUTING FACTOR: CHANCE  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	1	1.4	18	25.0	26	36.1	18	25.0	9	12.5	72	21.6
Unimportant	1	0.9	37	34.3	37	34.3	21	19.4	12	11.1	108	32.3
Neither Impt nor Unimpt	4	5.3	33	43.4	20	26.3	15	19.7	4	5.3	76	22.8
Important	4	5.1	25	32.1	32	41.0	11	14.1	6	7.7	78	23.4

\*Percentages Rounded

$\chi^2 = 15.98$

DF = 12

P = 0.19

TABLE 38  
 CONTRIBUTING FACTOR: MENTOR  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	4	8.3	9	18.8	20	41.7	13	27.1	2	4.2	48	14.5
Unimportant	1	1.9	16	30.2	15	28.3	12	22.6	9	17.0	53	16.0
Neither Impt nor Unimpt			29	43.9	22	33.3	10	15.2	5	7.6	66	19.9
Important	5	3.0	57	34.5	60	36.4	29	17.6	14	8.5	165	49.7

\*Percentages Rounded

$\chi^2 = 21.47$

DF = 12

P = 0.04

TABLE 39  
 CONTRIBUTING FACTOR: INTERNSHIP  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	≤30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	7	4.5	42	26.9	55	35.3	38	24.4	14	9.0	156	46.8
Unimportant	1	1.3	25	33.3	30	40.0	14	18.7	5	6.7	75	22.5
Neither Impt nor Unimpt	2	3.9	18	35.3	20	39.2	2	3.9	9	17.6	51	15.3
Important			26	51.0	11	21.6	11	21.6	3	5.9	51	15.3

\*Percentages Rounded

$\chi^2 = 27.1$

DF = 12

P = 0.01

TABLE 40  
 CONTRIBUTING FACTOR: MEMBER  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	2	3.9	15	29.4	20	39.2	10	19.6	4	7.8	51	15.0
Unimportant	2	1.7	36	30.8	41	35.0	26	22.2	12	10.3	117	34.5
Neither Impt nor Unimpt	4	5.4	26	35.1	23	31.1	14	18.9	7	9.5	74	21.8
Important	2	2.1	36	37.1	33	34.0	17	17.5	9	9.3	97	28.6

\*Percentages Rounded

$X^2 = 4.95$

DF = 12

P = 0.96

TABLE 41  
 CONTRIBUTING FACTOR: LEADER  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	1	2.4	15	36.6	14	34.1	10	24.4	1	2.4	41	12.1
Unimportant	1	1.0	36	34.6	39	37.5	19	18.3	9	8.7	104	30.7
Neither Impt nor Unimpt	4	5.4	26	35.1	26	35.1	11	14.9	7	9.5	74	21.8
Important	4	3.3	36	30.0	39	32.5	27	22.5	14	11.7	120	35.4

\*Percentages Rounded

$\chi^2 = 8.86$

DF = 12

P = 0.72



TABLE 42  
 CONTRIBUTING FACTOR: RESPONSIBILITY  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	1	12.5	1	12.5	4	50.0	1	12.5	1	12.5	8	2.4
Unimportant			3	33.3	3	33.3	3	33.3			9	2.7
Neither Impt nor Unimpt	1	8.3	5	41.7	1	8.3	2	16.7	3	25.0	12	3.5
Important	8	2.6	104	33.5	110	35.5	60	19.4	28	9.0	310	91.5

\*Percentages Rounded

$\chi^2 = 13.55$

DF = 12

P = 0.33

TABLE 43  
 CONTRIBUTING FACTORS: INTERIM  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	4	4.2	31	32.6	33	34.7	19	20.0	8	8.4	95	28.4
Unimportant			13	28.9	22	48.9	8	17.8	2	4.4	45	13.5
Neither Impt nor Unimpt	2	5.1	18	46.2	13	33.3	3	7.7	3	7.7	39	11.7
Important	4	2.6	48	31.0	48	31.0	37	23.9	18	11.6	155	46.4

\*Percentages Rounded

$\chi^2 = 14.67$

DF = 12

P = 0.26

TABLE 44  
 CONTRIBUTING FACTOR: RELOCATE  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	6	3.6	52	30.8	57	33.7	39	23.1	15	8.9	169	50.3
Unimportant			17	41.5	17	41.5	3	7.3	4	9.8	41	12.2
Neither Impt nor Unimpt	3	6.8	19	43.2	14	31.8	5	11.4	3	6.8	44	13.1
Important	1	1.2	25	30.5	28	34.1	20	24.4	8	9.8	82	24.4

\*Percentages Rounded

$$\chi^2 = 14.60$$

$$DF = 12$$

$$P = 0.26$$

TABLE 45  
 CONTRIBUTING FACTOR: RESUME  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A			11	19.6	22	39.3	16	28.6	7	12.5	56	16.8
Unimportant			17	38.6	17	38.6	6	13.6	4	9.1	44	13.2
Neither Impt nor Unimpt	2	3.8	20	38.5	17	32.7	7	13.5	6	11.5	52	15.6
Important	8	4.4	63	34.6	61	33.5	38	20.9	12	6.6	182	54/5

\*Percentages Rounded

$$X^2 = 15.47$$

$$DF = 12$$

$$P = 0.22$$

TABLE 46  
 CONTRIBUTING FACTOR: TIMING  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	1	5.3	3	15.8	6	31.6	5	26.3	4	21.1	19	5.6
Unimportant	1	5.6	4	22.2	8	44.4	2	11.1	3	16.7	18	5.3
Neither Impt nor Unimpt	2	6.7	10	33.3	10	33.3	6	20.0	2	6.7	30	8.9
Important	6	2.2	94	34.8	95	35.2	53	19.6	22	8.1	270	80.1

\*Percentages Rounded

$\chi^2 = 11.41$

DF = 12

P = 0.49

TABLE 47  
 CONTRIBUTING FACTOR: COMMITTEES  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	6	8.1	21	28.4	22	29.7	20	27.0	5	6.8	74	22.1
Unimportant			25	39.1	20	31.3	11	17.2	8	12.5	64	19.1
Neither Impt nor Unimpt	2	2.8	24	33.8	25	35.2	15	21.1	5	7.0	71	21.2
Important	2	1.6	41	32.5	50	39.7	20	15.9	13	10.3	126	37.9

\*Percentages Rounded

$\chi^2 = 17.08$

DF = 12

P = 0.15

TABLE 48  
 CONTRIBUTING FACTOR: RESEARCH  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	7	6.3	36	32.4	32	28.8	25	22.5	11	9.9	111	33.0
Unimportant			37	42.0	28	31.8	14	15.9	9	10.2	88	26.2
Neither Impt nor Unimpt	2	2.7	27	36.0	29	38.7	10	13.3	7	9.3	75	22.3
Important	1	1.6	12	19.4	28	45.2	17	27.4	4	6.5	62	18.5

\*Percentages Rounded

$\chi^2 = 21.78$

DF = 12

P = 0.04

TABLE 49  
 CONTRIBUTING FACTOR: PUBLICATIONS  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	6	5.7	31	29.5	36	34.3	25	23.8	7	6.7	105	31.5
Unimportant			35	40.2	27	31.0	15	17.2	10	11.5	87	26.1
Neither Impt nor Unimpt	1	1.3	27	35.5	26	34.2	11	14.5	11	14.5	76	22.8
Important	3	4.6	18	27.7	26	40.0	15	23.1	3	4.6	65	19.5

\*Percentages Rounded

$\chi^2 = 17.30$

DF = 12

P = 0.14



TABLE 50  
 CONTRIBUTING FACTOR: PERSONNEL  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	2	14.3	3	21.4	4	28.6	5	35.7			14	4.1
Unimportant			7	35.0	8	40.0	5	25.0			20	5.9
Neither Impt nor Unimpt	3	11.1	7	25.9	8	29.6	7	25.9	2	7.4	27	8.0
Important	4	1.4	96	34.5	100	36.0	49	17.6	29	10.4	278	82.0

\*Percentages Rounded

$\chi^2 = 25.22$

DF = 12

P = 0.01

TABLE 51  
 CONTRIBUTING FACTOR: COUNSELING  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	2	6.3	7	21.9	10	31.3	9	28.1	4	12.5	32	9.5
Unimportant			11	30.6	16	44.4	7	19.4	2	5.6	36	10.7
Neither Impt nor Unimpt	3	4.4	20	29.4	30	44.1	11	16.2	4	5.9	68	20.1
Important	5	2.5	75	37.1	62	30.7	39	19.3	21	10.4	202	59.8

\*Percentages Rounded

$\chi^2 = 12.78$

DF = 12

P = 0.29

TABLE 52  
 CONTRIBUTING FACTOR: COMMUNICATION  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A			1	25.0	1	25.0	2	50.0			4	1.2
Unimportant			2	33.3	1	16.7	2	33.3	1	16.7	6	1.8
Neither Impt nor Unimpt	1	11.1	4	44.4	4	44.4					9	2.6
Important	9	2.8	106	32.9	113	35.1	63	19.6	31	9.6	322	94.4

\*Percentages Rounded

$X^2 = 9.52$

DF = 12

P = 0.66

TABLE 53  
 CONTRIBUTING FACTOR: COMMUNITY RELATIONS  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	1	4.5	4	18.2	10	45.5	6	27.3	1	4.5	22	6.5
Unimportant	1	2.2	14	31.1	18	40.0	9	20.0	3	6.7	45	13.2
Neither Impt nor Unimpt	1	1.7	20	33.3	17	28.3	12	20.0	10	16.7	60	17.6
Important	7	3.3	75	35.2	73	34.3	40	18.8	18	8.5	213	62.6

\*Percentages Rounded

$\chi^2 = 9.53$

DF = 12

P = 0.66

TABLE 54  
 CONTRIBUTING FACTOR: ADMIN EXP  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	2	8.7	6	26.1	10	43.5	5	21.7			23	6.8
Unimportant	1	3.0	12	36.4	9	27.3	9	27.3	2	6.1	33	9.8
Neither Impt nor Unimpt	4	9.8	11	26.8	16	39.0	8	19.5	2	4.9	41	12.2
Important	3	1.3	83	34.6	84	35.0	43	17.9	27	11.3	240	71.2

\*Percentages Rounded

$\chi^2 = 19.39$

DF = 12

P = 0.08

TABLE 55  
 CONTRIBUTING FACTOR: TEACHING EXP  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	6	10.3	24	35.3	20	29.4	13	19.1	4	5.9	68	20.4
Unimportant			18	36.7	18	36.7	10	20.3	3	6.1	49	14.7
Neither Impt nor Unimpt	2	3.4	26	44.1	18	30.5	10	19.6	3	5.1	59	17.7
Important	1	0.6	41	25.9	62	39.2	33	20.9	21	13.3	158	47.3

\*Percentages Rounded

$$X^2 = 28.84$$

$$DF = 12$$

$$P = 0.004$$

TABLE 56  
 CONTRIBUTING FACTOR: ADMIN/TEACH EXP  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	≤30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	6	9.8	20	32.8	18	29.5	14	23.0	3	4.9	61	18.4
Unimportant			14	32.6	16	37.2	9	20.9	4	9.3	43	13.0
Neither Impt nor Unimpt	3	5.8	22	42.3	16	30.8	10	19.2	1	1.9	52	15.7
Important	1	0.6	52	29.5	67	38.1	34	19.3	22	12.5	176	53.0

\*Percentages Rounded

$\chi^2 = 25.58$

DF = 12

P = 0.01

TABLE 57  
 CONTRIBUTING FACTOR: INF FEMALE NETWORK  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	3	3.1	27	27.8	29	29.9	28	28.9	10	10.3	97	29.0
Unimportant	1	1.3	25	33.3	30	40.0	9	12.0	10	13.1	75	22.5
Neither Impt nor Unimpt	3	4.7	22	34.4	25	39.1	8	12.5	6	9.4	64	19.2
Important	3	3.1	38	38.8	34	34.7	20	20.4	3	3.1	98	29.3

\*Percentages Rounded

$\chi^2 = 18.56$

DF = 12

P = 0.10



TABLE 58  
 CONTRIBUTING FACTOR: INF MALE NETWORK  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	≤30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	3	2.9	30	29.1	27	26.2	32	31.1	11	10.7	103	31.5
Unimportant	2	2.7	26	34.7	31	41.3	10	13.3	6	8.0	75	22.9
Neither Impt nor Unimpt	2	3.2	22	35.5	23	37.1	8	12.9	7	11.3	62	19.0
Important	3	3.4	32	36.8	36	41.4	13	14.9	3	3.4	87	26.6

\*Percentages Rounded

$\chi^2 = 20.00$

DF = 12

P = 0.07

TABLE 59  
 CONTRIBUTING FACTOR: FOR FEMALE NETWORK  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	≤30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	6	4.7	36	27.9	41	31.8	32	24.8	14	10.9	129	38.9
Unimportant	1	1.0	41	42.3	34	35.1	13	13.4	8	8.2	97	29.2
Neither Impt nor Unimpt	3	4.2	22	31.9	27	39.1	11	15.9	6	8.7	69	20.8
Important			14	37.8	13	35.1	8	21.6	2	5.4	37	11.1

\*Percentages Rounded

$\chi^2 = 13.63$

DF = 12

P = 0.33

TABLE 60  
 CONTRIBUTING FACTOR: FOR MALE NETWORK  
 ANALYSIS BY AGE  
 SUMMARY DATA\*

Response Category	<30		31-40		41-50		51-60		>60		Marginals	
	N	%	N	%	N	%	N	%	N	%	N	%
N/A	6	4.6	39	29.8	39	29.8	34	26.0	13	9.9	131	39.7
Unimportant		1.1	32	36.0	33	37.1	15	16.9	8	9.0	89	27.0
Neither Impt nor Unimpt	3	4.5	23	34.8	24	36.4	8	12.1	8	12.1	66	20.0
Important			17	38.6	20	45.5	6	13.6	1	2.3	44	13.3

\*Percentages Rounded

$\chi^2 = 16.40$

DF = 12

P = 0.17

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