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PERCEPTIONS OF SELECTED MINORITY STAFF IN THE
UNIVERSITY OF WISCONSIN SYSTEM OF THE EFFECTS OF
MENTORSHIP ON THEIR CAREER PROGRESSION

A THESIS

Presented to
the Graduate Faculty
University of Wisconsin-La Crosse

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of the Requirements for the Degree
Master of Science in Education
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ABSTRACT

The purpose of this study was to determine whether minorities in the University of Wisconsin (UW) System holding category 1 (executive/administrative/managerial) and category 3 (professional non-faculty) positions perceived mentorship as influential in their career progression, and whether there were statistically significant differences in these perceptions by gender, employment category, or age of the respondents.

The survey instrument used in this study was the Minority Perceptions of Mentoring and Career Progression (MPMCP). The surveys were distributed to the population by the Affirmative Action Officers at each of the 13 UW System institutions. Of the 430 surveys distributed, 207 usable surveys were returned and included in the study, resulting in a 48.1% return rate.

The microcomputer program PC Statistician was used to conduct frequency counts and to analyze the data using chi-square. The analyses showed that male respondents reported mentorship to be influential in their career progression significantly more often than did female respondents. No significant difference was found in the perceived influence of mentorship on career progression by employment category or by age.

Post hoc analyses showed that there was no significant difference in the number of mentors by gender reported by male and female respondents who did not perceive mentorship as influential, but a significant difference was found when comparing males and females who

perceived mentorship as influential. As a group, the female respondents reported fairly equal numbers of male and female mentors, whereas the male respondents reported a much greater percentage of male mentors.

Although the data show that males reported more mentoring experiences than females, had a disproportionately high percentage of male mentors as compared to female mentors, and considered these mentoring relationships to be more influential on their career advancement than females, the reasons for these differences are not known.

CHAPTER I

Introduction

Education is often viewed by our society as necessary preparation to achieve success. This view is reflected by Justice Earl Warren, who in 1954 stated "In these days it is doubtful that any person may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity is a right which must be made available on equal terms" (cited in American Association of State Colleges and Universities, 1988, p. 21). More recently, Mingle (1987) contends that the key to minority success is completion of a demanding, high-quality undergraduate curriculum. Minorities have traditionally been underrepresented in America's institutions of higher education and the result has been fewer opportunities for success available to minorities (Carter, 1982).

While the nation's population has been steadily increasing, its composition is changing dramatically. In 1980, the traditional college-age population (18 to 24-year olds) was approximately 77% White, 13% Black, 7% Hispanic, 2% Asian, and 1% American Indian. If current projections are realized, minorities will make up more than 30% of the college-age population in the year 2000 and nearly 40% in 2025 (Mingle, 1987).

From 1968 to 1984, the total number of students attending institutions of higher education increased from less than 5 million to more than 12 million. In 1984, 80% of the 12 million students enrolled

were white, 17% were resident minorities and 3% were nonresident aliens (Mingle, 1987).

Despite the number of minorities that enroll in colleges and universities, the problem of retention remains critical (Fields, 1987). The problem of minority retention appears to be more prevalent on predominantly white campuses (Farrell, 1984). Often these campuses have very small minority student populations and lack minority faculty and staff. James Vasquez, Associate Professor of Education at the University of Washington, alleges "American teachers are largely ignorant of minority culture, values, and learning styles, making it impossible for them to teach their minority students effectively" (Lambert, 1984).

The problem of the lack of role models for minority students frequently continues after graduation. It is viewed as advantageous for a young professional to have a mentor who will share knowledge acquired through years in the profession. However, just as there were few minority faculty and staff to provide mentoring in college, there are now few minorities available in the upper ranks to act as mentors to the new professional (Carter, 1982).

This lack of minority role models is detrimental not only to the minority students who may experience alienation, but also to the majority students. Many of the majority students have had limited interaction with minorities and will graduate from college without having had the opportunity to develop a knowledge base or skills in relating to diverse populations. Many graduates enter their first jobs and are confronted with the realization that the racial/ethnic make up

of their alma mater does not accurately reflect that of the "real world." The lack of skills in relating to diverse populations becomes a handicap.

Statement of the Problem

This study focused on minority staff in the UW (University of Wisconsin) System in category 1 (executive/administrative/managerial) and category 3 (professional non-faculty) positions and their perceptions of whether or not mentoring influenced their career progression. The research questions considered perceptions of the influence of mentorship on career progression by gender. The hypotheses predict that there are no significant differences of these perceptions by job category, gender, or age of respondent.

Importance of the Study

In 1980, the traditional college-age population consisted of 23% minorities. It has been projected that by the year 2000, this figure will increase to over 30%, and to nearly 40% by the year 2025 (Mingle, 1987).

While the minority population continues to grow, America's racial and ethnic minorities remain severely underrepresented in higher education and in nearly all occupational fields that require a college degree (Astin, 1982). Astin considers the extremely high rate of minority attrition from secondary schools to be the single most important factor in this underrepresentation, and the second most important factor is their above average attrition rate from undergraduate institutions.

Individuals who do not complete their high school education as well as those who do not pursue post-secondary education have limited opportunities in the work force. Traditionally, there have been jobs in industry and manufacturing available to persons with very little formal education, but the technological advances that have been made in this country and the transition to a trade and service-oriented economy have caused the number of these jobs to decline. More and more, post-high school training is becoming vital for well-paid employment. More than half the new jobs created over the 1984-2000 period will require education beyond high school; one-third will require a college degree (Wegmann, Chapman, & Johnson, 1989).

If the underrepresentation of minorities in higher education and high minority attrition rates do not improve substantially in the coming years, this country's economy and society will be negatively affected. Maguire (1982) cautions that "when the educational, social, and economic attainment of large segments of any nation's population is low, the cultural and economic life of that nation is adversely affected and, if the condition persists, placed in peril" (p. 21). Maguire further contends that not only is the society deprived of the contributions that these individuals could make if they were educationally empowered, but many of them risk becoming a burden to society- "tax eaters not tax payers" as Lyndon Johnson used to warn (Maguire, p. 21).

Therefore, it is not only the large number of minorities who do not obtain an education that are adversely effected, but society as a whole which supports those who do not have the means to support themselves. Through establishing and maintaining a commitment to educating the

nation's minority population it will serve not only to better our economy, but to increase social equality.

The need for this study is evidenced by the lack of research on mentoring among student services professionals and the absence of information on minorities' preferences regarding the race of their mentors.

Several potentially significant outcomes may result from this study. By increasing awareness of the benefits of mentoring, the study may be a catalyst in encouraging more professionals to act as mentors. More specifically, by addressing the problem of the lack of minorities in positions to act as mentors, an increased commitment to mentoring minorities may result by professionals of minority and non-minority ethnicity. This may facilitate the speed and ease with which minorities advance in their professions, thereby expanding the diversity at all levels and increasing the availability of minority mentors.

Another potential implication of the study is the value it may provide to the UW-System Design for Diversity, which could potentially impact the entire UW-System. Stressing the importance of mentorship would reinforce the idea that recruiting minority students and staff is not enough. The system must provide support and actively contribute to the development of minority students and staff. Mentors can fulfill both of these functions.

Finally, the study may result in further research on the role of mentoring in student affairs, particularly on the effect it has on minority career progression. The literature that could result from further research may sensitize professionals to the importance of

sharing knowledge and creating opportunities for minority professionals in less-advanced stages of their careers.

Related Literature

Much of the literature on mentoring has focused on the role of mentoring and the benefits of such relationships in business and corporations, though very little of this literature is empirically-based. Substantial research has been conducted pertaining to mentoring within higher education. Of the research on mentoring within higher education, the majority has focused on mentoring relationships among faculty and the role it plays in the career advancement of faculty. The remaining research on mentoring in higher education has looked primarily at the increased rate of retention and the benefits to the students from student-faculty or peer mentoring relationships. Of the research on mentoring in corporations and in higher education, there is ample discussion concerning the problems women face, such as the lack of women in higher levels available to act as mentors. Although minorities appear to face many of the same problems women do in obtaining quality mentoring relationships and for minority women the problem is compounded (Hall & Sandler, 1983), no empirical research was found that explores this.

Although research has been conducted on mentoring within higher education, very few studies have focused on mentoring within the student services profession (Kelly, 1984; Schmidt & Wolfe, 1980). None of the studies on mentoring within student services have specifically addressed the problems and needs of minorities.

Of the published articles on the topic of mentoring, the majority consist of testimonials or opinions concerning the benefits of being mentored. This is especially true of the literature on mentoring in corporations. Although the literature is strongly biased in favor of mentorship, there exists a lack of empirical data to support the majority of the claims (Merriam, 1983). The literature on mentoring largely ignores successful but unmentored men and women (Merriam).

In order to present the importance of mentorship in relation to minority career progression, the following two areas will be discussed: Benefits of mentorship and accessibility of mentorship to minorities.

Benefits of Mentorship

Despite the lack of empirical data, mentorship is viewed as beneficial in business and academia. Although the degree to which mentorship is considered influential in career progression varies between studies, no study was found to refute the benefits of being mentored.

George and Kummerow (1981) believe that women do not need mentors in order to progress in their careers, but having a mentor speeds the progression. They contend, "While talented women can and obviously do progress in organizations without the help of a mentor, a positive, supportive and more experienced guide can expedite the process in a variety of ways. A bright student may not need additional help to excel, but specialized tutoring can often get her where she wants to go faster" (p. 44).

Business. The literature on mentoring in business appears to be based on personal observation and opinions of the authors rather than on empirical data. The literature suggests a variety of benefits to be gained from having a mentor. In their article on mentoring for professional women, George and Kummerow (1981) cite what they consider to be some of the functions a mentor may perform: to help reveal and clarify the formal and informal networks in an organization; to help a young professional build confidence by identifying attributes she may have overlooked; to act as an insightful sounding board in the process of self-discovery and goal setting; and to acquaint the protege with people in positions of power and influence.

Management consultant Lynn Cullum, in an interview with Business Week ("Women Finally Get," 1978), asserts that mentorship involves the functions of both coach and godfather. The coach can be an intellectual mentor who helps the protege set the standard of professional performance, meet it, and set the next standard, or the coach can be a cultural mentor who familiarizes the protege with the environment. The godfather watches out for the interests of the protege, assisting with advancements and rewards.

Bolton (1980) contends that perhaps equally as important as the knowledge gained by the protege is the impressions that are created within others. Bolton says, "The unspoken message is that 'this person is O.K. because I have taken him or her under my wing. They are worthy of my attention and are therefore worthy of yours'" (p. 199).

Bolton's opinion is reflected by other authors. Halcomb (1980) stresses the need for women to have a top man at her side saying, in

effect, "She's okay. She can do it. She belongs." Halcomb contends that "For a woman this male endorsement is absolutely essential in the corporate world" (p. 15).

Shelton (cited in Merriam, 1983), "evaluated a formal mentoring program for protected class (women and minority) managers of a large midwestern public utility. The experimental group of 40 mentees had been in the program for one year. A control group was matched subject-by subject on seven demographic variables. There were no significant differences between groups with respect to salary change or number of job rotations. A significant difference was found between the mentored and nonmentored groups on a promotability rating, with the mentored group showing an increase in promotability" (p. 166).

Donald S. Perkins, chairman and chief executive officer of the Jewel Companies, stated in an interview with Harvard Business Review that "I don't know that anyone has ever succeeded in any business without having some unselfish sponsorship or mentorship, whatever it might have been called. Everyone who succeeds has had a mentor or mentors. We've all been helped" ("Everyone Who," 1978, p. 100).

Academia. In a report on academic mentoring for women students and faculty, Hall and Sandler (1983) state the following benefits the protege has to gain from a mentoring relationship: individual recognition and encouragement; honest criticism and informal feedback; advice on how to balance professional responsibilities and set priorities; knowledge of the informal rules for advancement, as well as political and substantive pitfalls to be avoided; information on how to behave in a variety of professional settings; appropriate ways of making

contact with authorities in a discipline; skills for showcasing one's own work; an understanding of how to build a circle of friends and contacts both within and outside one's institution; and a perspective on longterm career planning.

The benefits of mentoring to the protege have been reviewed by other authors. DeCoster and Brown (1982) suggest that the mentor assists the protege by providing guidance and sharing knowledge. Schmidt and Wolfe (1980) suggest that the mentor may be considered a translator of the political arena and gives the protege an awareness of the system's standards and norms. They state that a major function of the mentor is to "act as a sponsor or 'door opener' using connections with others in the field to promote the professional development of the protege" (p. 48). Moore (1982) stresses the importance of the mentor in pulling the protege into the inner circle, and asserts that possibly the most important function of the mentor is to assist in career advancement.

Carter (1982) concludes that for professional advancement in academia, especially for women and minorities, a mentor relationship is not merely desirable, it is absolutely necessary.

Although many of the studies on mentoring in business and academia are not empirically based, there is strong agreement from both fields that mentorship can contribute significantly to career advancement.

Accessibility of Mentorship to Minorities

There is little literature acknowledging the lack of minorities who have "made it" and are available to act as mentors (Carter, 1982; Collins, 1982; Hall & Sandler, 1983), whereas there is extensive

documentation of the special problems of women in finding suitable mentors (Campbell, 1982; Carter, 1982; Collins, 1982; Hall & Sandler, 1983; Moore & Salimbene, 1981; Moore, 1982; Schmidt & Wolfe, 1980). Researchers agree that many of the minorities and women who have reached top positions and could act as mentors have become too involved in, or overwhelmed by, the struggle for survival and maintaining success to be a mentor to aspiring women and minority professionals (Carter, 1982; Hall & Sandler, 1983).

Despite the increasing number of advocates of mentoring as a means of upward mobility for women and minority professionals (Speizer, 1981; Campbell, 1982; Moore, 1982), some researchers argue that the cross race and/or cross gender nature of most of these relationships is linked to unexpected negative outcomes. Levinson, Darrow, Klein, & Levinson (1978) allege that a mentor-protégé relationship between two white males does not necessarily function the same as a relationship in which the protégé is a woman or a minority. They contend that such a relationship carries negative social baggage which can become an insurmountable barrier for both parties.

One potential concern of either or both parties in a cross-gender mentoring relationship is the sexual or romantic interest colleagues might infer. Hall and Sandler (1983) allege that many senior men may hesitate to mentor women for fear of rumors of sexual involvement. George and Kummerow (1981) state that mentoring between opposite sexes can create tension with spouses. Schmidt and Wolfe (1980) suggest that should a mentoring relationship contain a romantic interest, it may provoke gossip that would be damaging to both the mentor and the

protege. They further contend that the protege must consider the impact of a break in the romantic involvement on the professional sponsorship.

A concern of some women and minorities is being the token woman or minority, or being viewed as such (Moore, 1982). Moore contends that "the additional performance demands of being 'the only' was often cited by minority and female proteges as a reason why they were not willing to function as mentors themselves, at least in the short run" (p. 26).

Kanter (1977) and Moore suggest that women with "token" status may feel that because they were recognized and selected, they are an exception to other women, thereby encouraging them to participate in keeping other women out of the group.

Levinson et al (1978) suggests that while cross-gender mentoring can be of great value, its actual value is often limited by "the tendency, frequently operating in both of them, to make her (the female protege) less than she is: to regard her as attractive but not gifted, as a gifted woman whose sexual attractiveness interferes with work and friendship, as an intelligent but impersonal pseudo-male or as a charming little girl who cannot be taken seriously" (p. 98).

Carter (1982) contends that the system is at fault for creating institutional barriers to the professional development and career advancement of women and minorities. She further states that the present white male dominated society has given women and minorities the rank of second class citizens.

Business. Phillips, as cited in McNeer (1983) and in Merriam (1983), studied the career development of 331 women managers and executives in business and industry. In addition to a survey, 50 of the

women were interviewed. On the survey, 61% reported having had one or more mentors who assisted in their professional advancement. Interviews indicated that mentors could be primary or secondary. Primary mentors went out of their way to help, and cared about the protege personally as well as professionally. Secondary mentors were seen as more "businesslike" and assisted the protege as a part of their own duties. Three-fourths of the women interviewed identified primary mentors, and all named one or more secondary mentors. Phillips cautiously concludes that while mentors played a significant part in the career development of most of the women in her study, they were "by no means the only factor in the women's success" (p. 123).

A study of 3,976 male and 28 female executives who were listed in the "Whos's News" column of the Wall Street Journal in 1977 was conducted by international consulting firm Heidrick and Struggles, Inc. Of the 1,250 executives (less than 1% women) who responded to the survey, nearly two-thirds reported having had a mentor and one-third reported having had two or more mentors (Roche, 1979). Although it is tempting to infer from this study that the majority of executives in the population have had mentors and that mentoring may have even attributed to their success, one must wonder about the incidence of mentoring among the 69% who didn't respond to the survey. The study claims that for the women reporting to have had mentors, 7 in 10 of the women's mentors were male. The study further reported that only 1 in 50 of the men had a female mentor, and virtually none of the female mentors were in business. This raises the question: do women prefer males as mentors, or would they more often choose female mentors if they were available?

Since there are limited minorities in the position to act as mentors, a similar question can be posed: do minorities prefer white males as mentors, or would they choose other racial/ethnic minorities if they were available?

Academia. Hall and Sandler (1983) and Moore (1982) assert that members of professional peer systems tend to choose proteges that are most like themselves and often overlook those who are different. Moore (1982) agrees, arguing that the homogeneity shared by the inner circle of administrators at an institution generally extends past similarity of attitudes and behaviors to similarity of sex, ethnic origin, and religion.

Simeone (1987) agrees that mentoring relationships between white males vary substantially from relationships in which one of the parties is a woman. She asserts "In academe, as in most workplaces, many of the important exchanges and decisions occur behind the scenes--over a drink, on the tennis court, or during dinner at a convention. If women are always absent from such settings, or if their presence alters the nature of the interaction, then they are effectively excluded from the support and collaboration accessible to their male counterparts". This argument would seem to apply equally well to mentoring relationships in which the protege is a minority.

Barrax (1985) conducted in-depth interviews with 15 female and 15 male administrators in 3 universities in order to uncover similarities and differences in the career profiles of men and women who have achieved similar administrative positions. Barrax found that more than 75% of the women and men had mentors or role models in both their

educational and their professional experiences. In the Barrax study, women in the sample, no less than men, regard mentors as important factors in their career development.

In the literature on the topic of mentoring, there are few exceptions to the view that women and minorities do not have the same opportunities as white males to experience mentoring relationships (Barrax, 1985; Kelly, 1984). A pattern exists in the literature in which barriers to mentoring opportunities are discussed in reference to women while ignoring that minorities face many of these same barriers. One of the few articles that discusses mentorship and the benefits to minorities involved in such relationships contends that mentorship for blacks has been limited since few blacks have attained powerful decision-making positions and therefore are not in positions to function as mentors (Campbell, 1982).

Summary

The review of the related literature reveals that mentorship is viewed as beneficial to career progression. The rate of mentorship varies substantially, and it appears that much of the variation can be attributed to the scope of each study's definition of the term "mentor". Having an interviewer present to clarify the term "mentor" may account for why the literature reveals a greater incidence of mentoring when subjects were interviewed in depth, rather than surveyed by questionnaire.

Researchers agree that the system is white male dominated and that women and minorities do not have the same opportunities as the white male. Mary Rowe, Special Assistant to the President at Massachusetts

Institute of Technology, claims that women need mentors not only of their own race and sex, but of the race and sex that commands the environment in which they are trying to become competent (Hall & Sandler, 1983).

The literature lacks research on minorities' barriers to mentorship opportunities, while similar research pertaining to women is abundant. Although substantial research has been conducted on mentoring in the corporate world and among college and university faculty, there is an absence of knowledge concerning mentoring in student services.

Assumptions

The following assumptions were made for this study:

1. The surveys included in the data analysis were completed by minorities in the UW System holding category 1 or category 3 positions.
2. The subjects responded honestly to the questions on the research instrument.
3. The respondents read the definition of the term "mentor" on the survey instrument and responded to the appropriate questions in the context of this definition.
4. Respondents were categorized as perceiving mentorship as influential in their career progression if they marked "having a mentor who assisted in my professional development" as one of the top three factors in their career progression in section L of the survey instrument. All other respondents were categorized as not perceiving mentorship as influential in their career progression.

5. The research instrument accurately measured respondents' perception that mentorship was or was not influential in their career progression.

Research Questions and Hypotheses

The following two research questions were asked:

1. How is the influence of mentorship on career progression perceived by minority men holding category 1 or category 3 positions?
2. How is the influence of mentorship on career progression perceived by minority women holding category 1 or category 3 positions?

The following two hypotheses were tested:

1. There is no statistically significant difference in the perceptions of mentorship influence on career progression between minorities in category 1 and category 3 positions.
2. The perceptions of mentorship influence on career progression by minorities in category 1 and category 3 positions do not differ significantly by age.

Definition of Terms

For the purpose of this study, the following terms are defined:

Executive/Administrative/Managerial: All persons whose assignments require primary (and major) responsibility for management of the institution, or a customarily recognized department or subdivision thereof. All officers holding such titles as President, Vice President, Dean, Director, or the equivalent, as well as officers subordinate to any of these administrators with such titles as Associate Dean, Assistant Dean, Executive Officer of academic departments (department heads, or the equivalent) if their principal activity is administrative

(Equal Employment Opportunity Commission [EEOC], 1989) (see Appendix A for list of titles).

Professional Non-Faculty: Persons employed for the primary purpose of performing academic support, student service and institutional support activities and whose assignments would require either college graduation or experience of such kind and amount as to provide a comparable background. Titles may include librarians, accountants, personnel, counselors, systems analysts, coaches, lawyers, and pharmacists (EEOC) (see Appendix B for list of titles).

Category 1: Term used to refer to the Executive/Administrative/Managerial job classification (EEOC).

Category 3: Term used to refer to the Professional Non-Faculty job classification (EEOC).

Minority: For the purpose of this study, the term refers to the following racial/ethnic groups: American Indian or Alaskan native, Hispanic, Black, and Asian or Pacific Islander.

American Indian or Alaskan Native: A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition (EEOC).

Asian or Pacific Islander: A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. The area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa (EEOC).

Black: A person having origins in any of the Black racial groups of Africa (EEOC).

Hispanic: A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race (EEOC).

Mentor: A trusted and experienced supervisor or advisor who has personal and direct interest in the development and/or education of a younger or less experienced individual, usually in professional education or professional occupations.

Perception: Awareness of external objects, conditions, relationships, etc., as a result of sensory stimulations; a continuous process of integration of present and past sensory impressions; more broadly, awareness of whatever sort, however brought about (Good, 1973, p. 418).

Career progression: Movement from lower level jobs to increasingly higher level jobs that involve greater responsibility.

Career Advancement: Alternate term for career progression.

Student Services: Area whose mission is to support, complement, and supplement academic programs and enhance the total growth of students by contributing to their cultural, social, intellectual, physical, and emotional development. Encompasses the following five areas: 1) administrative services; 2) financial aid; 3) support services; 4) student life; and 5) student development (Thompson & Corey, 1984).

Design for Diversity: A UW System plan for improving recruitment and retention of minority students, faculty, and staff, and for improving the minority environment of each UW System campus.

University of Wisconsin System: The administrative body of the state of Wisconsin public institutions of higher education.

CHAPTER II

Method

Sample and Setting

The population of this study consisted of minority men and women who were employed during the fall semester of 1988 at one of the 13 four-year coeducational institutions in the UW System and were classified as executive/administrative/managerial (category 1) or professional non-faculty (category 3). Appendix A lists the UW System titles included in category 1 and Appendix B lists the titles included in category 3. Table 1 identifies the breakdown of the respondents by gender within each category.

Table 1
Number and Percentage of
Respondents by Category and Gender

Gender	Category 1		Category 3		Total	
	No.	%	No.	%	No.	%
Male	29	14	61	30	90	44
Female	19	9	77	37	96	46
Total	48	23	138	67	186	90*

*NOTE: 21 respondents (10%) did not indicate their gender, position/title, or both.

The UW-System is one of the largest public higher education systems in the United States. The System is comprised of 13 universities, 13 two-year centers, and statewide extension, which serve approximately 164,000 students (Theobald & Barish, 1988). The system extension, each center and each university is headed by a chancellor, who reports to the UW System President. The UW System is governed by a Board of Regents.

The two largest universities in the System are UW-Madison, Wisconsin's land-grant institution, and UW-Milwaukee, serving the state's metropolitan area. Both UW-Madison and UW-Milwaukee offer undergraduate, graduate, postdoctoral, and advanced studies.

The University of Wisconsin System began as two separate systems: one system originated with the larger institutions at Madison and Milwaukee and the other system consisted of 9 normal schools authorized to offer baccalaureate degree programs. With the addition of varied liberal arts programs, the normal schools became state teachers colleges and eventually state universities. The University of Wisconsin System was created in 1971 by a state law that merged the state's two public university systems under one Board of Regents. Today, the broad system mission is to teach, do research, provide extended education beyond the boundaries of the campuses and engage in public service (Theobald & Barish, 1988).

The UW-System staff consists primarily of whites, with minorities comprising 5.3% of the total number of employees. Of the minority employees in the UW-System, the 1987-1988 breakdown by race reported 37.8% were black, 37.1% were Asian, 17.8% were Hispanic, and 7.2% were American Indian (EEOC, 1978).

The percentage of respondents from each racial/ethnic group included in this study was 12% American Indian or Native Alaskan, 23% Hispanic, 29% Black, 32% Asian or Pacific Islander, 1% other, and 3% did not identify their racial/ethnic background. Table 2 identifies the breakdown of category and gender within the 4 racial groups.

Table 2
Number of Respondents in Each Racial Group
by Gender and Category

Ethnic Group	Category 1		Category 3		Total
	male	female	male	female	
American Indian and Alaskan Native	4	2	3	15	24
Hispanic	9	4	17	12	42
Black	9	10	14	20	53
Asian and Pacific Islander	5	2	26	28	61
Total	27	18	60	75	180

Note. The table includes only the respondents who on the survey identified their race, gender, and position title.

Respondents were asked to indicate their age by marking the age group to which they belong. Table 3 shows the breakdown of the respondents by age group.

Table 3
Number and Percentage of Respondents
by Age Group

Age Group	Gender		Total
	Male	Female	
<26			
Number	4	3	7
Percentage	1.9%	1.5%	3.4%
26-35			
Number	32	27	59
Percentage	15.5%	13.1%	28.6%
36-45			
Number	44	49	93
Percentage	21.4%	23.8%	45.2%
46-55			
Number	19	18	37
Percentage	9.2%	8.7%	18.0%
56>			
Number	5	5	10
Percentage	2.4%	2.4%	4.8%
Total	104	102	206

Note. One respondent did not identify his or her sex or age.

Respondents from the following universities were included in the study: UW-Eau Claire, UW-Green Bay, UW-La Crosse, UW-Madison, UW-Milwaukee, UW-Oshkosh, UW-Parkside, UW-Platteville, UW-River Falls, UW-Stevens Point, UW-Stout, UW-Superior, and UW-Whitewater. Appendix C contains a breakdown of the total return rate by institution.

Research Design

Design

The two research questions and hypothesis 2 utilize a descriptive design. The purpose of this type of design is to determine and report the way things are. The researcher has no control over what is, and can only measure what already exists (Gay, 1987).

Hypothesis 1 utilizes a causal-comparative design. What distinguishes hypothesis 1 as causal-comparative is that the independent variable, which in this hypothesis is category 1/category 3, is not manipulated, whereas in an experimental design the independent variable is manipulated. In this study, the independent variables were gender, employment category, and age. The dependent variable was the perception of mentorship.

Internal Validity

Using a self-report questionnaire can negatively affect the validity of a study in that respondents may interpret questions differently than the researcher had intended or they may need clarification on one or more items. Furthermore, there is no standardized measurement of the influence of mentorship. Other possible threats to the validity of a study such as this in which a single group is studied only once are history, maturation, differential selection of subjects, and mortality.

History refers to the occurrence of any event which is not a part of the experimental treatment but which may affect performance on the dependent variable (Gay, 1987). Since this was a "one-shot study" and there was only one test, the relevance of events that may have occurred

between testings that would have been of concern in other research designs does not exist. However, of concern are the events that may have occurred due to a random or non-random section of the population before the testing that could affect the results of the study (Campbell & Stanley, 1963). For example, if one or more of the institutions used in this study had implemented a mentoring program for staff, significant differences in perceptions of the influence of mentorship by institution may have resulted. The findings of the study could be altered substantially if such an occurrence took place at UW-Madison or UW-Milwaukee, the institutions comprising the majority of this study's population.

Another factor pertaining to validity is maturation. Maturation refers to physical or mental changes that may occur within the subjects over a period of time (Gay, 1987). These changes may affect the subjects' performance on the measure of the dependent variable. Maturation between testing could not occur in this one shot study, although it is possible that some individuals read the survey but did not write responses and return the instrument to the researcher until later. Respondents who did not fill out the survey immediately after reading it may have become more aware of the effects of the variables of the study in their lives.

Differential selection of subjects usually occurs when already formed groups are used and refers to the fact that the groups may be different before the study even begins (Gay, 1987). Gay suggests avoiding already formed groups, and if they are used a pretest is recommended to check for initial equivalence. In this study the groups

were formed on the basis of race and employment category, and no pretest was administered.

Mortality refers to the fact that subjects who drop out of a group before the completion of the study may share a characteristic such that their absence has a significant effect on the results of the study (Gay, 1987). Since no pretest or posttest was given, there could be no mortality between tests. Mortality is relevant to this study in that subjects who chose to participate in the study may share a common characteristic and those who chose not to participate may share a common characteristic. Mortality would have an adverse effect on this study if, for example, those who chose not to participate had overall significantly fewer mentors than those who chose to participate. These possible threats to the validity of the study should be considered when interpreting the findings.

Instrumentation

Data Collection Device

The instrument used in the study was the Minority Perceptions of Mentoring and Career Progression (MPMCP) which was developed by the researcher for this study (shown in Appendix D). The instrument was adapted for this study from the Status of Women Form II (STOW-Form II) which was developed by Taylor (1974) and adapted by Greer (1981) for use in her dissertation research. The STOW-Form II was designed to measure the status and perceptions of black women administrators in higher education.

The MPMCP is a 3 page, 24 item self-report questionnaire. Of the 24 items, 19 involved marking the blank next to the appropriate

response, with 4 of the 19 items providing space for comments. There was 1 question that involved writing a number in the blank, and 3 questions that involved writing a short response. The final item on the survey was an essay question in which the individual completing the survey determined the length of the response.

Page 1 of the survey contained questions designed to obtain demographic data. Pages 2 and 3 were designed to gain information concerning: factors that influenced the respondent's decision to pursue a career in higher education; factors that were most helpful in the respondent's career advancement; if the respondent had one or more mentors during their career; the races, sexes, and ages of the respondent's mentors; respondent's preference, if any, for the race and sex of the mentors; respondent's perceptions of whether their own race and/or sex has had any impact on their career advancement; and advice that would have been helpful to the respondent in beginning their career. In addition to the questions used to obtain data with which to test the hypotheses and research questions, filler questions were used for the purpose of making the survey instrument less transparent.

Reliability and Validity

Due to the nature of this study and the variables involved (race, gender, employment category, and mentorship), no pilot study was conducted. A pilot study was impractical due to the small size of the population being studied as well as the additional assistance that would be needed from the AAOs. Reliability of the survey instrument has not been verified and this must be considered when interpreting the findings.

The validity of the survey instrument has not been established. The instrument has face validity in that it appears to measure what it claims to measure. This can improve response rate. The survey instrument does have consensus validity. The 4 members of the committee for this study critiqued the instrument for apparent validity and their suggestions were incorporated in order to increase the degree of validity. Of the 4 committee members, 2 were females and 2 were males, 2 were minorities and 2 were non-minorities.

Procedure

A report entitled Minorities in the University of Wisconsin System Workforce 1987 was obtained from the Affirmative Action Office at UW-La Crosse. It was used to approximate the number of minorities in category 1 and category 3 positions at each of the UW System institutions.

The Affirmative Action Officer (AAO) at UW-La Crosse sent a letter to the AAOs at the other 12 UW System institutions notifying them of the study and asking for their cooperation. It was stated in the letter that the researcher would be contacting them by telephone in a week to ask for their assistance in distributing the survey to the designated population (see Appendix E for letter).

The researcher followed up the letter by contacting the AAOs by telephone and asking them to confirm the number of minorities at their institution holding category 1 or category 3 positions. Since the Affirmative Action Offices cannot release the names of individuals who fit the criteria of the study, each AAO was asked to assist by distributing surveys to all minorities at their institution in category 1 and category 3 positions. They were informed that if they agreed to

participate, they would be sent a packet containing one sealed envelope for each individual at their institution whom they had identified as a member of a racial minority group holding a category 1 or category 3 position. Each sealed envelope would contain a cover letter, a survey instrument, and a self-addressed stamped envelope. The cover letter gave a brief description of the study, assured anonymity, and asked that they complete the survey and return it in the enclosed envelope within one week (see Appendix E for cover letter).

The AAOs were asked to assist by labeling the envelopes with the names and addresses of the individuals at their institution who fit the description of the population to be studied and to send them through campus mail. All 13 AAOs agreed to send the surveys to the designated population.

On November 20 and 21 the packets of surveys were sent to the AAOs. Since the dates of Thanksgiving Break included November 24 through November 27, the packets would have arrived at each AAO's office just before the Thanksgiving break or after it had begun. Included in each packet of surveys was a letter to the AAO, describing in detail the population to be studied and asking that they label and send the envelopes containing the surveys within a week after they had returned to work following the holiday break (see Appendix E).

Initially 403 surveys were sent to the AAOs. UW-La Crosse requested one additional survey and UW-Madison requested an additional 42 surveys. The requested additional surveys were sent to the 2 institutions within one day of receiving the requests. Due to yearly employee turnover not all surveys were used. UW-Milwaukee returned 11

surveys and UW-Oshkosh returned 5 surveys. The remaining institutions were contacted by telephone to confirm that all surveys were sent out.

No follow-up mailing was conducted due to the fact that identifying the population and labeling the envelopes was a time-consuming task, especially in the larger institutions, and it was not feasible for the AAOs to repeat the process.

Although respondents were asked in the cover letter to fill out and return the surveys within one week, surveys were received between the dates of November 30, 1988 and January 12, 1989. No surveys were discarded due to not meeting the designated time frame. Although surveys were not labeled with the date they were received by the researcher, a daily record was kept as to what institutions the responses came from. The survey data was not entered into the computer on a daily basis as it was received by the researcher, but rather after all surveys returned to the researcher had been received.

Data Analysis

A total of 218 surveys were returned. Of the 218 returned, 7 of the surveys were not filled out, with notes attached stating that they were not members of the targeted population. Of the 7 who did not fill out the surveys, 5 indicated that they were not minorities and the remaining 2 wrote that they did not fit the criteria of the study. Of the surveys returned that were filled out, 4 were unusable. One was not classified as category 1 or category 3, and 3 were not members of a minority group. Of the 430 surveys distributed by the 13 AAOs, a total of 207 usable surveys were returned resulting in a 48.1% return rate.

The data were tabulated by the researcher using the microcomputer program, PC Statistician. To answer the research questions, frequency distributions of males and females were calculated to determine the number of respondents that perceive mentorship as influential in their career progression, followed by a chi-square analysis to determine if there is a statistically significant difference in this perception by gender.

Chi-square analyses were performed to test the hypotheses. These analyses were conducted to determine if there is a significant difference in perception of the influence of mentorship on career advancement between category 1 and category 3 respondents and by age.

Four post hoc analyses were conducted. A chi-square analysis was used to determine if there is a significant difference in the number of male and female mentors had by males and females who did not perceive mentorship as influential in their career advancement. Similarly, a chi-square analysis was used to determine if there was a significant difference in the number of male and female mentors had by males and females who perceive mentorship as influential in their career advancement. Post hoc analyses using chi-square were conducted to determine if there was a statistically significant difference in responses to section L of the survey instrument by gender and by employment category.

Delimitations

The population of this study was limited to minority men and women in the 13 universities in the UW System holding executive/administrative/managerial (category 1) and professional non-faculty

(category 3) positions who could be identified by the AAO of each institution. Minorities who are not easily recognized as minorities and who chose not to report their minority status to their institution's affirmative action office would not have received the survey. Since instructional staff is classified as category 2, they were not included in the study unless a percentage of their appointment was classified as category 1 or category 3. Consequently, the results can only be generalized to minorities in these two specific categories at the 13 four-year institutions in the UW System.

CHAPTER III

Results and Discussion

This chapter contains the results of the statistical analyses of the research data and discussion of the findings. When interpreting the data, two important points must be considered: 1) Respondents were considered to perceive mentorship as influential in their career progression if on the survey instrument under section L they marked "having a mentor who assisted in my professional development" as one of the three factors that were most helpful in the advancement of their career. Those respondents who did not mark this answer were categorized as not perceiving mentorship as influential. 2) For both research questions and hypotheses, respondents who did not identify themselves according to the independent variable being tested (gender, employment category, and age group) were not included in the analysis.

Results

Research Questions

Two major research questions were posed. They were: how is the influence of mentorship on career progression perceived by minority men holding category 1 or category 3 positions? And, how is the influence of mentorship on career progression perceived by minority women holding category 1 and category 3 positions? The frequencies and percentages of perception of the influence of mentorship on career progression are reported for men and women in Table 4 and Table 5, respectively. Respondents who did not rate mentorship as one of the three most

influential factors in their career progression are categorized in the tables under the heading "no", and respondents who rated mentorship as one of the three most influential factors in their career progression are categorized in the tables under the heading "yes". Table 6 contains the observed and expected frequencies of men and women in their perceptions of the influence of mentorship upon their career progression.

Table 4

Frequency and Percentage of Males' Perceptions
of the Influence of Mentorship on their Career Progression

	Mentorship Influence		
	No	Yes	Total
Frequency	73	31	104
Percentage	70.2%	29.8%	100%

Table 5

Frequency and Percentage of Females' Perceptions
of the Influence of Mentorship on their Career Progression

	Mentorship Influence		
	No	Yes	Total
Frequency	83	15	98
Percentage	84.7%	15.3%	100%

Table 6
 Chi Square Analysis of Respondents' Perceptions
 of the Influence of Mentorship by Gender

Gender	Mentorship Influence		
	No	Yes	Total
Male			
Observed	73	31	104
Expected	80.32	23.68	
Contribution to	0.67	2.26	
Female			
Observed	83	15	98
Expected	75.68	22.32	
Contribution to	0.71	2.40	
chi-square = 6.03 p = .0137			

Utilizing chi-square to compare the observed and expected frequencies of perception of the influence of mentorship on career progression by gender, a statistically significant difference was found at the .01 level. This result indicates that a greater proportion of males perceive mentorship influence than do females.

Tests of Hypotheses

Hypothesis 1. Hypothesis 1 predicted that there would be no statistically significant difference in the perceptions of mentorship influence on career progression between minorities holding category 1 and category 3 positions. The results of the statistical analysis are shown in Table 7.

Table 7
 Chi Square Analysis of Mentorship Influence
 by Employment Category

Employment Category	Mentorship Influence		
	No	Yes	Total
1			
Observed	35	12	47
Expected	36.47	10.53	
Contribution to	0.03	0.09	
3			
Observed	107	29	136
Expected	105.53	30.47	
Contribution to	0.01	0.03	
Total	142	41	183
chi-square = 0.15 p= .6660			

The differences between the observed frequencies and the expected frequencies are not significant in any of the four cells. The obtained chi-square of 0.15 with 1 degree of freedom is not significant at the .05 level. Therefore, hypothesis 1 is accepted.

Hypothesis 2. Hypothesis 2 predicted that the perceptions of mentorship influence on career progression by minorities holding category 1 and category 3 positions would not differ significantly by age of the respondent. The results of the statistical analyses are shown in Table 8.

Table 8

Chi Square Analysis Mentorship Influence by Age Group

Age Group	Mentorship influence		
	No	Yes	Total
<26			
Observed	6	1	7
Expected	5.25	1.75	
Contribution to	0.11	0.32	
46-55			
Observed	27	10	37
Expected	27.75	9.25	
Contribution to	0.02	0.06	
Total	33	11	44

chi-square = 0.51 p = .4824

Note. When applying Yates' Correction, a chi-square of 0.057 is obtained at an alpha level of approximately 0.7.

Three of the four cells show little difference between the observed and expected frequencies. The cell for the "yes" responses of the group aged less than 26 years contributes most to the obtained chi square result. The obtained chi-square of 0.51 with 1 degree of freedom is not statistically significant at the .05 level.

The Yates' Correction technique was applied to correct for the lack of continuity due to the small sample size. Utilizing Yates' Correction, a chi-square of 0.057 an alpha level of approximately 0.82 with 1 degree of freedom were obtained. Even with the application of this corrective technique, there is no statistically significant difference at the .05 level.

By comparing the age group (<26) that least reported mentorship to be influential in their career progression to the age group (46-55) that most often reported it as influential, no statistical significance was found at the .05 level. Given that no significance was found between the groups with the highest and lowest frequencies, it can be concluded that no significant differences in perception of mentorship influence exist among the five age groups. Therefore, hypothesis 2 is accepted.

Post Hoc Analysis. The researcher questioned whether the statistically significant difference found between males and females concerning the importance of mentorship could be at least partially attributed to the gender of their mentors. Therefore, post hoc analyses were conducted to determine if a statistically significant difference existed in the number of male and female mentors of male and female respondents. The frequency tabulations indicate that within the sample, 29.8% of the males and 15.3% of the females rated mentorship as one of the 3 factors that has most influenced the advancement of their career. The first post hoc analysis was conducted to determine if a statistically significant difference existed in the number of mentors by gender reported by male and female respondents who did not rate mentorship as influential in their career progression (see Table 9).

Table 9
 Chi Square Analysis of Perceived Lack of Mentorship Influence
 by Gender of Mentors and Respondents

Gender of Mentors	Gender of Respondents			
	Male		Female	
	No.	%	No.	%
Male	64	71.1	65	58.6
Female	26	28.9	46	41.4
chi-square = 3.406		p = .0619		

The chi-square technique was used to assess the significance of differences in the number of mentors by gender reported by males and females who did not rate mentorship as influential in their career progression. The obtained chi-square of 3.406 with 1 degree of freedom approached statistical significance at an alpha level of .05. The males who did not rate mentorship as influential reported more male mentors (71.1%) than female mentors (28.9%), while females who did not rate mentorship as influential reported more equal numbers of male and female mentors (58.6% and 41.4%, respectively). Although differences by gender of the respondents are apparent in the percentages of male and female mentors, the differences are not statistically significant.

A similar post hoc analysis was conducted to determine if there was a statistically significant difference in the number of male and female mentors by gender of the respondents who perceived mentorship as influential in their career progression (see Table 10).

Table 10

Number and Percentage of Mentors by Gender of Respondents
Who Perceived Mentorship as Influential in Career Progression

Gender of Mentors	Gender of Respondents			
	Male		Female	
	No.	%	No.	%
Male	56	82.4	15	53.6
Female	12	17.6	13	46.4
chi-square = 8.530		p = .0039		

The chi-square technique was used to determine if there was a statistically significant difference in the number of mentors by gender reported by males and females who rated mentorship as influential in their career progression. The obtained chi-square of 8.530 with 1 degree of freedom was statistically significant at the .01 level. While women who acknowledged mentorship as influential reported nearly equal numbers of male and female mentors (53.6% and 46.4%, respectively), men who acknowledged mentorship as influential reported a much higher number of male mentors (82.4%) than female mentors (17.6%).

The researcher further questioned whether there were statistically significant differences between males and females and between category 1 and category 3 in their responses to section L of the survey instrument in which the respondent was asked to indicate the 3 factors that were most helpful in the advancement of his or her career.

A post hoc analysis was conducted in which males and females were compared on each of the 14 items in section L to determine if there was

a significant difference. Using a chi-square with 1 degree of freedom, the only factor statistically significant at the .05 level was the statement "having a mentor who assisted in my professional development", and this analysis was already performed in response to the research questions.

A similar post hoc analysis was conducted to determine if there was a statistically significant difference between category 1 and category 3 on their responses in section L of the survey. The only item that was statistically significant when testing at the .05 level was "being in the right place at the right time" (see Table 11).

Table 11

The Perceived Influence of "Being in the Right Place at the Right Time" on Career Progression by Employment Category

Employment Category	No Influence	Influence	Total
Category 1	22	25	47
Category 3	93	44	137
Total	115	69	184

chi-square = 6.632 p = .0100

Using the obtained chi-square of 6.632 with 1 degree of freedom, a statistically significant difference was found at the .01 alpha level for the statement "being in the right place at the right time", with 53.2% of category 1 respondents rating this factor as influential in their career progression as compared to 32.1% of category 3 respondents

selecting this factor as influential. When comparing the other items in section L of the survey by employment category, no statistically significant differences were found at the .05 level.

Discussion

The purpose of this study was to determine if minorities in the UW System holding category 1 and category 3 positions perceived mentorship as influential in their career progression and whether the perceptions varied by employment category, gender, and age.

The results indicate that men report mentorship as having been influential in their professional advancement statistically significantly more often than women. There is no statistically significant difference between category 1 and category 3 respondents in perceptions of the influence of mentoring. Similarly, there is no statistically significant difference in perceptions by age of respondent.

In this study men reported significantly more mentors than women, and men more often rate mentorship as influential in their career advancement. While these findings are consistent with much of the literature, they are contrary to the findings of Barrax (1985). In her in-depth interviews with 15 female and 15 male administrators in 3 universities, Barrax found that women, no less than men, regard mentors as important factors in their career development. The reader must consider that the data for this study was obtained through self-report questionnaires and the Barrax study conducted interviews and used a significantly smaller population. The review of the literature shows a higher rate of mentorship is reported in studies in which the subjects

are interviewed as opposed to responding on a self-report instrument. This may be the result of the subject having the opportunity to clarify misperceptions of mentorship. It is also possible that the interviewer may unintentionally prompt the subject to give the desired answer.

George and Kummerow (1981) assert that although mentorship is not vital to professional advancement, it can increase the rate of advancement. Other authors agree, suggesting that of the many functions a mentor performs, some of the most beneficial to the protege are: acting as an advocate for the protege, which often earns the acceptance of the protege in the inner circle (Bolton, 1980; Halcomb, 1980); providing guidance and sharing knowledge (DeCoster & Brown, 1982); acting as a sponsor or "door opener" by using connections with others in the field to promote the professional development of the protege (Schmidt & Wolfe, 1980; Moore, 1982); and functioning as a translator of the political arena (Schmidt & Wolfe, 1980; Hall & Sandler, 1983).

While the results from this study indicate that women have fewer mentors than men and that women less often than men regard mentorship as influential in their career advancement, the reasons for the differences are not known. Are women less receptive to mentoring than men, or are there other important factors such as lack of availability of mentors of different races and sexes? Do women in fact have more mentoring relationships than they recognize, viewing them as friendships rather than in a careering context? Do mentoring relationships between individuals of the same race and gender function differently than cross-race and cross-gender mentoring relationships? These questions need to be explored in order to gain a better understanding of mentoring

and the factors that contribute to a positive and productive mentoring experience. These questions could be the basis for future research on mentoring.

The results of the post hoc analyses indicate that there is a statistically significant difference in the number of male and female mentors by gender of the respondents who perceive mentorship as influential in their career progression. Male respondents reported significantly more male mentors than female mentors, while female respondents reported nearly equal numbers of male and female mentors. There was no statistical significance in the number of mentors by gender by males and females who did not perceive mentorship as influential.

The factors that are responsible for the difference in the number of male and female mentors by gender of the respondents based on perception of the influence of mentorship on career progression are not known. Numerous authors have concluded that females have less accessibility to suitable mentors than men (Campbell, 1982; Carter, 1982; Collins, 1982; Hall & Sandler, 1983; Moore & Salimbene, 1981; Moore, 1982; Schmidt & Wolfe, 1980). Lack of accessibility could be a factor as to why women who perceive mentorship as influential do not have more same-sex mentors. It is also possible that since there are generally more males than females in high ranking positions in organizations, aspiring professionals of both genders would look to males for mentoring since they would hold more power.

The post hoc analysis comparing category 1 and category 3 responses of the factors perceived to be most influential on career progression yielded a statistically significant difference on only one item.

Category 1 respondents chose the statement "being in the right place at the right time" as one of the three most important factors in their career progression significantly more often than did category 3 respondents. Since this is a fairly ambiguous statement, there may be a range of interpretations by the respondents. It is conceivable that more category 1 than category 3 respondents were promoted from within their present institution and were therefore "in the right place" at the time their future positions became available. It is also possible that "being in the right place at the right time" could be the factor chosen if the respondent learned of future positions while attending professional conferences or meetings or through contacts made at these events.

Limitations

The following limitations may affect the internal and external validity and therefore should be considered when interpreting the data.

1. A self-report instrument was used to collect the data. A disadvantage of the self-report method is that respondents may interpret questions differently than the researcher had intended.

2. Although the term "mentor" was defined in the survey instrument, respondents had to ultimately decide this for themselves. It was not possible to measure mentorship on a standardized scale.

3. In some cases respondents may have had mentors without recognizing that a mentoring relationship was occurring. An informal mentoring relationship may be viewed by the mentee only as a friendship.

4. Respondents who did not identify themselves by the independent variables in the research questions and hypotheses were not included in

the analyses that required the data. For example, respondents who did not give their title could not be listed as category 1 or category 3 and were therefore left out of the analysis of hypothesis 1.

5. The return rate of the survey instruments was 48.1%. No follow-up mailing was sent to obtain a higher return rate since the AAOs facilitated the original mailing and a second mailing was not feasible.

6. The 51.9% of the population that did not complete and return the surveys may have changed the data dramatically had they responded.

Recommendations

1. It is recommended that colleges and universities educate their faculty and staff on the benefits of mentoring and how to use a mentoring relationship to increase their knowledge and advance their career. Equally as important, colleges and universities should educate their faculty and staff on the benefits one gains from being a mentor.

2. It is recommended that in addition to educating faculty and staff about the benefits of mentoring, colleges and universities should create awareness that mentoring relationships may function differently, depending on the races and genders of the mentor and protege.

3. It is recommended that the UW System explore the possible benefits of mentoring, and consider recognizing mentoring others and being mentored in the evaluation process.

4. It is recommended that a structured mentoring program be available to university faculty, staff, and graduate students, and that participants be given the opportunity, if possible and if preferred, to have a mentor or protege of the same gender and race.

5. It is recommended that the study be repeated utilizing the interview method of collecting data as opposed to the self-report instrument and compare the results.

6. It is recommended that a study be conducted of a population of student services employees who perceive mentorship as influential in their career progression and focus on the factors in the mentoring relationship that they perceive having the positive effect on their advancement.

7. It is recommended that a study be conducted on a population of males and females of diverse races (including caucasian) to obtain information on the population's attitudes on mentoring and being mentored by people of other races or the opposite sex. This study should obtain information concerning whether women report fewer mentors than men because they have less access to mentors or if there are other factors involved.

CHAPTER IV

SUMMARY

The purpose of this study was to determine whether minorities in the UW System holding category 1 and category 3 positions perceived mentorship as influential in their career progression, and whether there were significant differences in these perceptions by gender, category, and age of the respondents.

Subjects consisted of 207 minority men and women holding category 1 or category 3 positions at the 13 four-year coeducational institutions in the UW System during the fall semester of 1988.

The survey instrument used in this study was the Minority Perceptions of Mentoring and Career Progression (MPMCP). The MPMCP was adapted for this study from the Status of Women Form II (STOW-Form II), which was developed by Taylor (1974) and adapted by Greer (1981).

A sealed envelope was sent to the AAOs for each individual predetermined by their institution's AAO to be a racial minority holding a category 1 or category 3 position at their institution. Each sealed envelope contained a cover letter, a survey instrument, and a self-addressed stamped envelope. The cover letter gave a brief description of the study, assured anonymity, and asked that they complete the survey and return it in the enclosed envelope within one week. The AAOs distributed the surveys through campus mail. Of the 430 surveys distributed by the 13 AAOs, 207 usable surveys were returned, resulting in a 48.1% return rate.

The survey data was compiled by hand and computer analyzed using PC Statistician. Frequency counts were performed and this data was used to perform chi-square analyses.

Male respondents reported mentorship to be influential in their career progression more often than female respondents. No significant difference was found in the perceived influence of mentorship on career progression by category or by age. The post hoc analyses show that there is no significant difference in the number of mentors by gender reported by male and female respondents who did not rank mentorship as influential. A significant difference was found when comparing males and females who rated mentorship as influential. As a group, the female respondents reported fairly equal percentages of male and female mentors (57.6% and 42.4%, respectively). The male respondents, however, reported having many more male mentors (75.9%) than female mentors (24.1%).

Although the data show that men report more mentoring experiences than women, have a disproportionate number of male mentors as compared to female mentors, and consider these mentoring relationships as more influential on their career advancement than women, the reasons for the differences are not known. Some possibilities may be: fewer mentors available to women; women may not know how to make mentoring relationships work to their advantage; fear of problems that could be encountered in cross-gender mentoring relationships; and, women may be less likely to recognize a mentoring relationship as more than a friendship or work relationship.

References

- American Association of State Colleges and Universities. (1988). Minorities in higher education: At a turning point. Washington, DC: Author.
- Astin, A. (1982). Minorities in American higher education. San Francisco: Jossey-Bass.
- Barrax, J. D. (1985). A comparative career profile of female and male university administrators. Journal of NAWDAC, 48(2), 59-64.
- Bolton, E. B. (1980). A conceptual analysis of the mentor relationship in the career development of women. Adult Education, 30(4), 195-207.
- Campbell, V. (1982, February). Making it despite double discrimination. Educational Leadership, pp. 337-338.
- Carter, H. M. (1982). Making it in academia: Can gurus get you there? Paper presented at the Annual Meeting of the American Educational Research Association, New York, NY.
- Collins, R. L. (1982). Colonialism on campus: A critique of mentoring to achieve equity in higher education. Paper presented at the Annual Meeting of the American Educational Research Association, New York, NY.
- DeCoster, D. A., & Brown, R. D. (1982). Mentoring relationships and the educational process. In R. D. Brown & D. A. DeCoster (Eds.), Mentoring-transcript systems for promoting student growth (New directions for student services, no. 19) (pp. 5-15). San Francisco: Jossey-Bass.
- Equal Employment Opportunity Commission. (1989, September). Form 221, Higher Education Staff Information (EEO-6) (No. 3046-0009). Washington, D.C.
- Everyone who makes it has a mentor. (1978, July). Harvard Business Review, pp. 89-101.
- Farrell, C. S. (1984, March 21). Two-year colleges offer haven for many Hispanic students. The Chronicle of Higher Education, p. 1, 11.
- Fields, C. (1987, September 16). Closing the education gap for Hispanics: State aims to forestall a divided society. The Chronicle of Higher Education, pp. A1, A36, A38.
- Gay, L. R. (1987). Educational research: Competencies for analysis and application (3rd ed.). Columbus: Merrill.

- George, P., & Kummerow, J. (1981, February). Mentoring for career women. Training, pp.44-49.
- Good, C. V. (1973). Dictionary of Education (pp. 413 & 558). New York: McGraw-Hill.
- Halcomb, R. (1980, February). Mentors and the successful woman. Across the Board, pp. 13-18.
- Hall, R. M., & Sandler, B. R. (1983). Academic mentoring for women students and faculty: A new look at an old way to get ahead. Washington, DC: Association of American Colleges.
- Kanter, R. M. (1977). Men and women of the corporation. New York: Basic Books.
- Kelly, K. K. (1984). Initiating a relationship with a mentor in student affairs. NASPA Journal, 1984, 21, 49-54.
- Lambert, C. (1984, March 28). Minority differences must be catered to, educator says. The Collegian, p. 7.
- Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. H., McKee, B. (1978). The seasons of a man's life. New York: Alfred Knopf, Inc.
- Maguire, J. (1988). Reversing the recent decline in minority participation in higher education. In American Association of State Colleges and Universities (Ed.), Minorities in public higher education: At a turning point (pp. 21-41). Washington, DC: American Association of State Colleges and Universities.
- McNeer, E. J. (1983). Two opportunities for mentoring: A study of women's career development in higher education administration. Journal of NAWDAC, 47(1), 70-76.
- Merriam, S. (1983). Mentors and proteges: A critical review of the literature. Adult Education Quarterly, 33(3), 161-173.
- Mingle, J. R. (1987). Focus on minorities: Trends in higher education participation of minorities (Report No. ECS-SHEEO-MP-87-2). Denver, CO: State Higher Education Executive Officers Association. (ERIC Document Reproduction Service No. ED 287 404)
- Moore, K. M. (1982). The role of mentors in developing leaders for the academe. Educational Record, pp. 23-28.
- Moore, K. M., & Salimbene, A. M. (1981). The dynamics of the mentor-protege relationships in developing women as academic leaders. Journal for Educational Equity and Leadership, 2(1), 51-64.
- Roche, G. R. (1979, January). Much ado about mentors. Harvard Business Review, pp. 14-16, 20, 24, 26-28.

- Schmidt, J. A., & Wolfe, J. S. (1980). The mentor partnership: Discovery of professionalism. NASPA Journal, 17, 45-51.
- Simeone, A. (1987, April 29). Women's networks on campuses are showing a new vitality. The Chronicle of Higher Education, p. 92.
- Speizer, J. J. (1981). Role models, mentors, and sponsors: The elusive concepts. Signs: Journal of Women in Culture and Society, 6(4), 692-712.
- Theobald, H. R., & Barish, L. S. (Eds.). (1988). Wisconsin blue book. Madison, WI: Wisconsin Legislative Reference Bureau.
- Thompson, C. F., Jr., & Corey, J. F. (1984). Introduction. In D. A. Boulton, W. A. Bryan, J. F. Corey, J. E. Marshall, D. D. McIntire, & T. H. Stafford, Jr. (Eds.), Student services: The state of our work (pp. 1-6). Chapel Hill: Author.
- Wegmann, R., Chapman, R., & Johnson, M. (1989). Work in the new economy (rev. ed.). Alexandria, VA: Robert Wegmann/American Association for Counseling and Development.
- Women finally get mentors of their own. (1978, October 23). Business Week, pp. 74, 79, 80.

APPENDIX A

UW SYSTEM CATEGORY 1 TITLES

UW SYSTEM CATEGORY 1 TITLES

(L)=Large Scope
 (M)=Medium Scope
 (S)=Small Scope
 (UWS)=UW System

President
 Executive Vice President
 Vice President
 Chancellor
 Dean
 Division Chairperson
 Campus Dean (Centers)
 Associate Vice President
 Assistant Vice President
 Secretary of the Regents
 Assistant Secretary of the Regents
 Trust Officer
 Assistant Trust Officer
 Vice Chancellor
 Associate Chancellor
 Associate Vice Chancellor
 Assistant Chancellor
 Assistant Vice Chancellor
 Associate Dean, Academic Affairs
 Associate Dean
 Assistant Dean
 Associate Campus Dean/Centers
 Assistant Campus Dean/Centers
 Director, Pharmacy Intern
 Academic Program Director
 Associate Academic Program Director
 Assistant Academic Program Director
 General Counsel
 Bursar (L)
 Bursar (M)
 Associate Bursar (L)
 Associate Bursar (M)
 Assistant Bursar (L)
 Assistant Bursar (M)
 Controller (L)
 Controller (M)
 Controller (S)
 Associate Controller (L)
 Associate Controller (M)
 Associate Controller (S)
 Assistant Controller (L)
 Assistant Controller (M)
 Assistant Controller (S)
 Dean of Students (L)
 Dean of Students (M)

Dean of Students (S)
Associate Dean of Students (L)
Associate Dean of Students (M)
Associate Dean of Students (S)
Assistant Dean of Students (L)
Assistant Dean of Students (M)
Assistant Dean of Students (S)
Registrar (L)
Registrar (M)
Registrar (S)
Associate Registrar (L)
Associate Registrar (M)
Associate Registrar (S)
Assistant Registrar (L)
Assistant Registrar (M)
Assistant Registrar (S)
University Physician
Associate University Physician
Assistant University Physician
State Cartographer
Associate State Cartographer
Assistant State Cartographer
Superintendent
Associate Superintendent
Assistant Superintendent
Deputy Superintendent
Commissioner of Athletics
Associate Commissioner of Athletics
Assistant Commissioner of Athletics
Director, Academic Advising (L)
Director, Academic Advising (M)
Associate Director, Academic Advising (L)
Associate Director, Academic Advising (M)
Assistant Director, Academic Advising (L)
Assistant Director, Academic Advising (M)
Director, Academic Computing Services (L)
Director, Academic Computing Services (M)
Associate Director, Academic Computing Services (L)
Associate Director, Academic Computing Services (M)
Assistant Director, Academic Computing Services (L)
Assistant Director, Academic Computing Services (M)
Director, Academic Personnel (L)
Associate Director, Academic Personnel (L)
Assistant Director, Academic Personnel (L)
Director, Accounting Services/ Associate Controller
Associate Director, Accounting
Assistant Director, Accounting
Director, Administrative Computing Services (L)
Director, Administrative Computing Services (M)
Director, Administrative Computing Services (S)
Associate Director, Administrative Computing Services (L)
Associate Director, Administrative Computing Services (M)

Associate Director, Administrative Computing Services (S)
 Assistant Director, Administrative Computing Services (L)
 Assistant Director, Administrative Computing Services (M)
 Assistant Director, Administrative Computing Services (S)
 Director, Admissions (L)
 Director, Admissions (M)
 Director, Admissions (S)
 Associate Director, Admissions (L)
 Associate Director, Admissions (M)
 Associate Director, Admissions (S)
 Assistant Director, Admissions (L)
 Assistant Director, Admissions (M)
 Assistant Director, Admissions (S)
 Director, Admissions and Records (L)
 Director, Admissions and Records (M)
 Director, Admissions and Records (S)
 Associate Director, Admissions and Records (L)
 Associate Director, Admissions and Records (M)
 Associate Director, Admissions and Records (S)
 Assistant Director, Admissions and Records (L)
 Assistant Director, Admissions and Records (M)
 Assistant Director, Admissions and Records (S)
 Director, Affirmative Action (L)
 Associate Director, Affirmative Action (L)
 Assistant Director, Affirmative Action (L)
 Director, Alumni Relations (L)
 Director, Alumni Relations (M)
 Associate Director, Alumni Relations (L)
 Associate Director, Alumni Relations (M)
 Assistant Director, Alumni Relations (L)
 Assistant Director, Alumni Relations (M)
 Director, Architecture and Engineering Services
 Associate Director, Architecture and Engineering Services
 Assistant Director, Architecture and Engineering Services
 Deputy Director, Athletics (L)
 Director, Athletics (M)
 Director, Athletics (S)
 Associate Director, Athletics (L)
 Associate Director, Athletics (M)
 Associate Director, Athletics (S)
 Assistant Director, Athletics (L)
 Assistant Director, Athletics (M)
 Assistant Director, Athletics (S)
 Director, Auxiliary Operations (L)
 Director, Auxiliary Operations (M)
 Associate Director, Auxiliary Operations (L)
 Associate Director, Auxiliary Operations (M)
 Assistant Director, Auxiliary Operations (L)
 Assistant Director, Auxiliary Operations (M)
 Director, Auxiliary Operations (UWS)
 Associate Director, Auxiliary Operations (UWS)
 Assistant Director, Auxiliary Operations (UWS)

Director, Budget (L)
Director, Budget (M)
Director, Budget (S)
Associate Director, Budget (L)
Associate Director, Budget (M)
Associate Director, Budget (S)
Assistant Director, Budget (L)
Assistant Director, Budget (M)
Assistant Director, Budget (S)
Director, Budget Planning & Development
Associate Director, Budget Planning & Development
Assistant Director, Budget Planning & Development
Director, Business Services (L)
Director, Business Services (M)
Associate Director, Business Services (L)
Associate Director, Business Services (M)
Assistant Director, Business Services (L)
Assistant Director, Business Services (M)
Director, Capital Budget
Associate Director, Capital Budget
Assistant Director, Capital Budget
Director, Career Planning & Placement (L)
Director, Career Planning & Placement (M)
Director, Career Planning & Placement (S)
Associate Director, Career Planning & Placement (L)
Associate Director, Career Planning & Placement (M)
Associate Director, Career Planning & Placement (S)
Assistant Director, Career Planning & Placement (L)
Assistant Director, Career Planning & Placement (M)
Director, Child Care (L)
Director, Child Care (M)
Director, Child Care (S)
Associate Director, Child Care (L)
Associate Director, Child Care (M)
Associate Director, Child Care (S)
Assistant Director, Child Care (L)
Assistant Director, Child Care (M)
Director, Computer Services (L)
Director, Computer Services (M)
Director, Computer Services (S)
Associate Director, Computer Services (L)
Associate Director, Computer Services (M)
Associate Director, Computer Services (S)
Assistant Director, Computer Services (L)
Assistant Director, Computer Services (M)
Assistant Director, Computer Services (S)
Director, Computing Services
Associate Director, Computing Services (UWS)
Assistant Director, Computing Services (UWS)
Director, Continuing Education (L)
Director, Continuing Education (M)
Director, Continuing Education (S)

Associate Director, Continuing Education (L)
Associate Director, Continuing Education (M)
Associate Director, Continuing Education (S)
Assistant Director, Continuing Education (L)
Assistant Director, Continuing Education (M)
Assistant Director, Continuing Education (S)
Assistant Director, Indirect Cost Studies
Director, Internal Audit (L)
Director, Internal Audit (M)
Associate Director, Internal Audit (L)
Associate Director, Internal Audit (M)
Assistant Director, Internal Audit (L)
Assistant Director, Internal Audit (M)
Director, Internal Audit (UWS)
Associate Director, Internal Audit (UWS)
Assistant Director, Internal Audit (UWS)
Director, International Education Program (M)
Associate Director, International Education Program (M)
Assistant Director, International Education Program (M)
Director, Intramural Sports (L)
Director, Intramural Sports (M)
Associate Director, Intramural Sports (L)
Associate Director, Intramural Sports (M)
Assistant Director, Intramural Sports (L)
Assistant Director, Intramural Sports (M)
Director, Library (L)
Director, Library (M)
Director, Library (S)
Associate Director, Library (L)
Associate Director, Library (M)
Associate Director, Library (S)
Assistant Director, Library (L)
Assistant Director, Library (M)
Assistant Director, Library (S)
Director, Management Engineering & Regional Services
Associate Director, Management Engineering & Regional Services
Assistant Director, Management Engineering & Regional Services
Director, Materials Management & Distribution
Associate Director, Materials Management & Distribution
Assistant Director, Materials Management & Distribution
Director, Medical Records
Associate Director, Medical Records
Assistant Director, Medical Records
Director, Media Development (L)
Director, Media Development (M)
Director, Media Development (S)
Associate Director, Media Development (L)
Associate Director, Media Development (M)
Associate Director, Media Development (S)
Assistant Director, Media Development (L)
Assistant Director, Media Development (M)
Director, New Student Services (L)

Director, New Student Services (M)
Director, New Student Services (S)
Associate Director, New Student Services (L)
Associate Director, New Student Services (M)
Associate Director, New Student Services (S)
Assistant Director, New Student Services (L)
Assistant Director, New Student Services (M)
Director, Nursing
Associate Director, Nursing
Assistant Director, Nursing
Assistant to President for Equal Opportunity Policy Studies
Associate Director, Office of Women and Equal Opportunity Policy Studies
Assistant Director, Office of Women and Equal Opportunity Policy Studies
Director, Payroll & Benefits
Associate Director, Payroll & Benefits
Assistant Director, Payroll & Benefits
Director, Personnel (L)
Director, Personnel (M)
Associate Director, Personnel (L)
Associate Director, Personnel (M)
Assistant Director, Personnel (L)
Assistant Director, Personnel (M)
Director, Personnel Services
Associate Director, Personnel Services
Assistant Director, Personnel Services
Director, Pharmacy
Associate Director, Pharmacy
Assistant Director, Pharmacy
Director, Physical Plant (L)
Director, Physical Plant (M)
Director, Physical Plant (S)
Associate Director, Physical Plant (L)
Associate Director, Physical Plant (M)
Associate Director, Physical Plant (S)
Assistant Director, Physical Plant (L)
Assistant Director, Physical Plant (M)
Assistant Director, Physical Plant (S)
Director, Planning & Construction (L)
Associate Director, Planning & Construction (L)
Assistant Director, Planning & Construction (L)
Director, Plant Engineering
Associate Director, Plant Engineering
Assistant Director, Plant Engineering
Director, Pre-Audit
Associate Director, Pre-Audit
Assistant Director, Pre-Audit
Director, Protective Services (L)
Director, Protective Services (M)
Associate Director, Protective Services (L)
Associate Director, Protective Services (M)
Assistant Director, Protective Services (L)
Assistant Director, Protective Services (M)

Director, Public Information (L)
Director, Public Information (M)
Associate Director, Public Information (L)
Associate Director, Public Information (M)
Assistant Director, Public Information (L)
Assistant Director, Public Information (M)
Director, Publications (L)
Director, Publications (M)
Associate Director, Publications (L)
Associate Director, Publications (M)
Assistant Director, Publications (L)
Assistant Director, Publications (M)
Director, Purchasing (L)
Director, Purchasing (M)
Associate Director, Purchasing (L)
Associate Director, Purchasing (M)
Assistant Director, Purchasing (L)
Assistant Director, Purchasing (M)
Director, Radio/Television (L)
Director, Radio/Television (M)
Associate Director, Radio/Television (L)
Associate Director, Radio/Television (M)
Assistant Director, Radio/Television (L)
Assistant Director, Radio/Television (M)
Director, Rehabilitation Services
Associate Director, Rehabilitation Services
Assistant Director, Rehabilitation Services
Director, Research Administration (L)
Director, Research Administration (M)
Associate Director, Research Administration (L)
Associate Director, Research Administration (M)
Assistant Director, Research Administration (L)
Assistant Director, Research Administration (M)
Director, Respiratory Care Services
Associate Director, Respiratory Care Services
Assistant Director, Respiratory Care Services
Director, Social Work
Associate Director, Social Work
Assistant Director, Social Work
Director, Student Services (L)
Director, Student Services (M)
Director, Student Services (S)
Associate Director, Student Services (L)
Associate Director, Student Services (M)
Associate Director, Student Services (S)
Assistant Director, Student Services (L)
Assistant Director, Student Services (M)
Director, Student Union (L)
Director, Student Union (M)
Director, Student Union
Associate Director, Student Union (L)
Associate Director, Student Union (M)

Associate Director, Student Union
Assistant Director, Student Union (L)
Assistant Director, Student Union (M)
Assistant Director, Student Union
Director, Surgical Services
Associate Director, Surgical Services
Assistant Director, Surgical Services
Director, Technical & Information Services
Associate Director, Technical & Information Services
Assistant Director, Technical & Information Services
Director, Telecommunications (L)
Director, Telecommunications (M)
Associate Director, Telecommunications (L)
Associate Director, Telecommunications (M)
Assistant Director, Telecommunications (L)
Assistant Director, Telecommunications (M)
Director, Training & Education
Associate Director, Training & Education
Assistant Director, Training & Education
Director, Trust Fund
Associate Director, Trust Fund
Assistant Director, Trust Fund
Director, University Housing (L)
Director, University Housing (M)
Director, University Housing (S)
Associate Director, University Housing (L)
Associate Director, University Housing (M)
Associate Director, University Housing (S)
Assistant Director, University Housing (L)
Assistant Director, University Housing (M)
Assistant Director, University Housing (S)
Director, UWC Library (L)
Director, UWC Library (M)
Director, UWC Library (S)
Director, Veterinary Medicine Teaching Hospital
Associate Director, Veterinary Medicine Teaching Hospital
Assistant Director, Veterinary Medicine Teaching Hospital
Director, unspecified (5)
Associate Director, unspecified (5)
Director, unspecified (6)
Associate Director, unspecified (6)
Assistant Director, unspecified (6)
Director, unspecified (7)
Associate Director, unspecified (7)
Assistant Director, unspecified (7)
Director, unspecified (8)
Associate Director, unspecified (8)
Assistant Director, unspecified (8)
Director, unspecified (9)
Associate Director, unspecified (9)
Assistant Director, unspecified (9)
Director, unspecified (10)

Associate Director, unspecified (10)
Assistant Director, unspecified (10)
Director, unspecified (11)
Associate Director, unspecified (11)
Assistant Director, unspecified (11)
Administrative Officer
Assistant Dean
Associate Dean
Director, Athletics-Madison
Secretary of the Faculty
Secretary of the Academic Staff
State Geologist
Director, State Laboratory of Hygiene
Senior Academic Planner
Academic Planner
Associate Academic Planner
Senior Budget Planner (L)
Senior Budget Planner (M)
Senior Budget Planner (S)
Budget Planner (L)
Budget Planner (M)
Budget Planner (S)
Associate Budget Planner (L)
Associate Budget Planner (M)
Associate Budget Planner (S)
Senior Policy & Planning Analyst
Policy & Planning Analyst
Associate Policy & Planning Analyst
Senior Special Assistant
Special Assistant
Senior System Legal Counsel
System Legal Counsel
Associate System Legal Counsel
Senior System Academic Planner
System Academic Planner
Associate System Academic Planner
Senior System Facilities Specialist
System Facilities Specialist
Associate System Facilities Specialist
Senior System Equal Opportunity Program Analyst
System Equal Opportunity Program Analyst
Associate System Equal Opportunity Program Analyst
Department Chairperson
Accountant 4 (Management)
Accountant 5 (Management)
Accountant 5 (Confidential)
Administrative Budget & Management Officer 1
Administrative Budget & Management Officer 2
Administrative Budget & Management Officer 3
Administrative Budget & Management Officer 4
Administrative Officer 1
Administrative Officer 1 (Confidential)

Administrative Officer 1 (Confidential/Supervisory)
Administrative Officer 1 (Supervisory)
Administrative Officer 2
Administrative Officer 2 (Confidential)
Administrative Officer 2 (Confidential/Supervisory)
Administrative Officer 2 (Supervisory)
Administrative Officer 3
Administrative Officer 4
Administrative Officer 5
Architect 5 (Management)
Architect 6 (Management)
Architect 6 (Supervisory)
Architect 7 (Management)
Architect 7 (Supervisory)
Architect 8 (Management)
Architect 8 (Supervisory)
Architect 9 (Management)
Assistant to Director-Athletics
Audit Supervisor 4 (Management)
Audit Supervisor 5 (Management)
Budget & Management Analyst 4
Budget & Management Analyst 4 (Management)
Budget & Management Analyst 5
Budget & Management Analyst 5 (Management)
Budget & Management Analyst 5 (Supervisory)
Budget & Management Analyst 6
Budget & Management Analyst 6 (Management)
Budget & Management Analyst 6 (Supervisory)
Chief, Contract Negotiations & Administration
Civil Engineer 3 (Supervisory)
Civil Engineer 5 (Management)
Civil Engineer 6 (Management)
Civil Engineer 7 (Management)
Civil Engineer 8 (Management)
Economist 3 (Management)
Economist 4 (Management)
Educational Services Assistant 3 (Management)
Educational Services Assistant 4 (Management)
Electrical Engineer 5 (Management)
Electrical Engineer 6 (Management)
Electrical Engineer 6 (Supervisory)
Electrical Engineer 7 (Management)
Electrical Engineer 7 (Supervisory)
Electrical Engineer 8 (Management)
Employee Relations Specialist 1
Employee Relations Specialist 1 (Management)
Employee Relations Specialist 1 (Supervisory)
Employee Relations Specialist 2
Employee Relations Specialist 2 (Management)
Employee Relations Specialist 2 (Supervisory)
Employee Relations Specialist 3
Employee Relations Specialist 3 (Management)

Employee Relations Specialist 3 (Supervisory)
Employee Relations Specialist 4 (Management)
Executive Personnel Officer 1
Executive Personnel Officer 2
Executive Personnel Officer 3
Executive Personnel Officer 4
Fiscal Administrative Officer 1
Fiscal Administrative Officer 2
Fiscal Administrative Officer 3
Fiscal Administrative Officer 4
Food Service Administrator 3
Food Service Administrator 4
Health Physicist Supervisor
Institution Business Administrator 1
Institution Business Administrator 2
Institution Business Administrator 3
Management Information Supervisor 6
Management Information Supervisor 7
Mechanical Engineer 6 (Management)
Mechanical Engineer 7 (Management)
Mechanical Engineer 8 (Management)
Mediator 1
Mediator 2
Mediator 3
Management Information Manager 1
Management Information Manager 2
Management Information Manager 3
Management Information Manager 4
Management Information Manager 5
Management Information Specialist 7
Management Information Supervisor 5 (Management)
Management Information Supervisor 6 (Management)
Nursing Supervisor 3
Nursing Supervisor 4
Payroll & Benefits Supervisor 4
Personnel Administrative Officer 1
Personnel Administrative Officer 1 (Supervisory)
Personnel Administrative Officer 2
Personnel Administrative Officer 2 (Supervisory)
Personnel Administrative Officer 3
Personnel Administrative Officer 4
Personnel Manager 4
Personnel Manager 4 (Management)
Personnel Manager 4 (Supervisory)
Personnel Manager 5
Personnel Manager 5 (Management)
Personnel Manager 5 (Supervisory)
Planning & Analysis Administrator 1
Planning & Analysis Administrator 2
Planning & Analysis Administrator 3
Planning & Analysis Administrator 4
Planning Analyst 5 (Confidential/Supervisory)

Program & Planning Analyst 6
Program & Planning Analyst 6 (Confidential)
Program & Planning Analyst 6 (Confidential/Supervisory)
Program & Planning Analyst 6 (Management)
Program & Planning Analyst 6 (Supervisory)
Program & Planning Analyst 7 (Confidential)
Program & Planning Analyst 7 (Confidential/Supervisory)
Program & Planning Analyst 7 (Supervisory)
Psychologist 5
Psychologist 6
Psychologist 6 (doctorate)
Real Estate Agent 4
Real Estate Agent 5
Research Administrator 1
Research Administrator 2
Research Administrator 3
Research Administrator 4
Research Analyst 6
Research Analyst 7
Research Analyst 7 (Confidential/Supervisory)
Research Analyst 7 (Management)
Research Analyst 8
Research Analyst 8 (Confidential/Supervisory)

APPENDIX B

UW SYSTEM CATEGORY 3 TITLES

UW SYSTEM CATEGORY 3 TITLES

SUBCATEGORY: DOCTORAL STAFF

Researcher
Associate Researcher
Assistant Researcher
Senior Scientist
Associate Scientist
Assistant Scientist
Senior Visiting Scientist
Associate Visiting Scientist
Assistant Visiting Scientist
Instrument Innovator Researcher
Associate Instrument Innovator Researcher
Assistant Instrument Innovator Researcher
Research Animal Veterinarian
Associate Research Animal Veterinarian
Assistant Research Animal Veterinarian

SUBCATEGORY: EMPLOYEES IN TRAINING

Research Associate
Postdoctoral Fellow
Postdoctoral Scholar
Postdoctoral Trainee
Post Graduate Trainee 1
Post Graduate Trainee 2
Post Graduate Trainee 3
Post Graduate Trainee 4
Post Graduate Trainee 5
Post Graduate Trainee 6
Post Graduate Trainee 7
Intern (Non-Physician)
Graduate Intern/Trainee
Honorary Associate/Fellow

SUBCATEGORY: OTHER ACADEMIC STAFF

Artist-in-Residence
Coach
Associate Coach
Assistant Coach
Consultant
Senior Academic Archivist
Academic Archivist
Senior Administrative Program Manager
Administrative Program Manager
Senior Athletic Trainer
Athletic Trainer
Senior Development Program Manager
Development Program Manager
Senior Instructional Program Manager

Instructional Program Manager
Senior Laboratory Manager
Laboratory Manager
Senior Outreach Program Manager
Outreach Program Manager
Senior Research Program Manager
Research Program Manager
Senior Student Services Program Manager
Student Services Program Manager
Senior Assistant to Chancellor-Affirmative Action
Assistant to Chancellor-Affirmative Action
Senior Academic Curator
Academic Curator
Associate Academic Curator
Senior Academic Librarian
Associate II Academic Librarian
Associate I Academic Librarian
Assistant Academic Librarian
Senior Administrative Program Specialist
Administrative Program Specialist
Associate Administrative Program Specialist
Senior Administrative Specialist
Administrative Specialist
Associate Administrative Specialist
Senior Advisor
Advisor
Associate Advisor
Senior Artist
Artist
Associate Artist
Senior Broadcast Specialist
Broadcast Specialist
Associate Broadcast Specialist
Senior Cartographer
Cartographer
Associate Cartographer
Senior Clinical Audiologist
Clinical Audiologist
Associate Clinical Audiologist
Senior Clinical Cancer Counselor
Clinical Cancer Counselor
Associate Clinical Cancer Counselor
Senior Clinical Dietician
Clinical Dietician
Associate Clinical Dietician
Senior Clinical Exercise Physiologist
Clinical Exercise Physiologist
Associate Clinical Exercise Physiologist
Senior Clinical Genetic Counselor
Clinical Genetic Counselor
Associate Clinical Genetic Counselor
Senior Clinical Anesthetist

Clinical Anesthetist
Associate Clinical Anesthetist
Senior Clinical Nurse Specialist
Clinical Nurse Specialist
Associate Clinical Nurse Specialist
Senior Clinical Optometrist
Clinical Optometrist
Associate Clinical Optometrist
Senior Clinical Pharmacist
Clinical Pharmacist
Associate Clinical Pharmacist
Senior Clinical Physical Therapist
Clinical Physical Therapist
Associate Clinical Physical Therapist
Senior Clinical Physician Assistant
Clinical Physician Assistant
Associate Clinical Physician Assistant
Senior Clinical Social Worker
Clinical Social Worker
Associate Clinical Social Worker
Senior Clinical Speech Pathologist
Clinical Speech Pathologist
Associate Clinical Speech Pathologist
Senior Counselor
Counselor
Associate Counselor
Senior Data Base Administrator
Data Base Administrator
Associate Data Base Administrator
Senior Development Specialist
Development Specialist
Associate Development Specialist
Senior Development Skills Specialist
Development Skills Specialist
Associate Development Skills Specialist
Senior Editor
Editor
Associate Editor
Senior Facilities Architect
Facilities Architect
Associate Facilities Architect
Senior Facilities Engineer
Facilities Engineer
Associate Facilities Engineer
Senior Facilities Planning Specialist
Facilities Planning Specialist
Associate Facilities Planning Specialist
Senior Geological Survey Specialist
Geological Survey Specialist
Associate Geological Survey Specialist
Senior Health Technologist, Hematology
Health Technologist, Hematology

Associate Health Technologist, Hematology
Senior Health Technologist, Histology
Health Technologist, Histology
Associate Health Technologist, Histology
Senior Health Technologist, Neurodiagnostic Testing
Health Technologist, Neurodiagnostic Testing
Associate Health Technologist, Neurodiagnostic Testing
Senior Health Technologist, Ophthalmology
Health Technologist, Ophthalmology
Associate Health Technologist, Ophthalmology
Senior Health Technologist, Organ Procurement
Health Technologist, Organ Procurement
Associate Health Technologist, Organ Procurement
Senior Health Technologist, Orthotics
Health Technologist, Orthotics
Associate Health Technologist, Orthotics
Senior Health Technologist, Orthoptics
Health Technologist, Orthoptics
Associate Health Technologist, Orthoptics
Senior Health Technologist, Perfusion
Health Technologist, Perfusion
Associate Health Technologist, Perfusion
Senior Health Technologist, Clinical Monitoring
Health Technologist, Clinical Monitoring
Associate Health Technologist, Clinical Monitoring
Senior Health Technologist, Environmental
Health Technologist, Environmental
Associate Health Technologist, Environmental
Senior Health Technologist, Peripheral Vascular
Health Technologist, Peripheral Vascular
Associate Health Technologist, Peripheral Vascular
Senior Health Technologist, Pulmonary Function
Health Technologist, Pulmonary Function
Associate Health Technologist, Pulmonary Function
Senior Information Manager
Information Manager
Associate Information Manager
Senior Information Processing Consultant
Information Processing Consultant
Associate Information Processing Consultant
Senior Institutional Planner
Institutional Planner
Associate Institutional Planner
Senior Instructional Specialist
Instructional Specialist
Associate Instructional Specialist
Senior Instrumentation Specialist
Instrumentation Specialist
Associate Instrumentation Specialist
Senior Instrumentation Technologist
Instrumentation Technologist
Associate Instrumentation Technologist

Senior Management Engineer
Management Engineer
Associate Management Engineer
Senior Marketing Specialist
Marketing Specialist
Associate Marketing Specialist
Senior Media Specialist
Media Specialist
Associate Media Specialist
Senior Outreach Specialist
Outreach Specialist
Associate Outreach Specialist
Senior Physician
Physician
Associate Physician
Senior Programmer Analyst
Programmer Analyst
Associate Programmer Analyst
Senior Psychologist
Psychologist
Associate Psychologist
Senior Radio/Television Artist
Radio/Television Artist
Associate Radio/Television Artist
Senior Recreation Specialist
Recreation Specialist
Associate Recreation Specialist
Senior Rehabilitation Specialist
Rehabilitation Specialist
Associate Rehabilitation Specialist
Senior Research Specialist
Research Specialist
Associate Research Specialist
Senior Residence Hall Manager
Residence Hall Manager
Associate Residence Hall Manager
Senior Special Librarian
Associate II Special Librarian
Associate I Special Librarian
Assistant Special Librarian
Senior Student Health Nurse
Student Health Nurse
Associate Student Health Nurse
Senior Student Services Coordinator
Student Services Coordinator
Associate Student Services Coordinator
Senior Student Services Specialist
Student Services Specialist
Associate Student Services Specialist
Senior System Facilities Planner
System Facilities Planner
Associate System Facilities Planner

Senior Systems Programmer
Systems Programmer
Associate Systems Programmer
Senior University Legal Counsel
University Legal Counsel
Associate University Legal Counsel
Senior University Relations Specialist
University Relations Specialist
Associate University Relations Specialist
Ad Hoc Program Specialist
Correspondence Tutor
Account Specialist 1 (Confidential)
Account Specialist 1 (Supervisory)
Account Specialist 2 (Confidential)
Account Specialist 2 (Supervisory)
Account Specialist 3 (Confidential)
Account Specialist 3 (Supervisory)
Account Specialist 4 (Confidential)
Account Specialist 4 (Supervisory)
Account Specialist 1
Account Specialist 2
Account Specialist 3
Account Specialist 4
Accountant 1
Accountant 1 (Confidential)
Accountant 1 (Supervisory)
Accountant 2
Accountant 2 (Confidential)
Accountant 2 (Supervisory)
Accountant 3
Accountant 3 (Confidential)
Accountant 3 (Supervisory)
Accountant 4
Accountant 4 (Confidential)
Accountant 4 (Supervisory)
Accountant 5
Administrative Assistant 3
Administrative Assistant 3 (Management)
Administrative Assistant 3 (Confidential)
Administrative Assistant 3 (Confidential/Supervisory)
Administrative Assistant 3 (Supervisory)
Administrative Assistant 4
Administrative Assistant 4 (Management)
Administrative Assistant 4 (Confidential)
Administrative Assistant 4 (Confidential/Supervisory)
Administrative Assistant 4 (Supervisory)
Administrative Assistant 5
Administrative Assistant 5 (Management)
Administrative Assistant 5 (Confidential)
Administrative Assistant 5 (Confidential/Supervisory)
Administrative Assistant 5 (Supervisory)
Agricultural Marketing Specialist 1

Agricultural Marketing Specialist 2
Agricultural Specialist 1
Agricultural Specialist 2
Agricultural Specialist 3
Agricultural Specialist 4
Agricultural Supervisor 1
Agricultural Supervisor 2
Agricultural Supervisor 3
Agricultural Supervisor 4
Agricultural Supervisor 5
Architect 1
Architect 2
Architect 3
Architect 4
Architect 5
Architect 5 (Supervisory)
Architect 6
Archivist 1
Archivist 2
Archivist 3
Archivist 4
Archivist 5
Archivist 6
Assessments Supervisor 2
Audit Specialist Supervisor 1
Audit Specialist Supervisor 2
Audit Specialist Supervisor 3
Audit Specialist 1
Audit Specialist 1 (Supervisory)
Audit Specialist 2
Audit Specialist 2 (Supervisory)
Audit Specialist 3
Audit Specialist 3 (Supervisory)
Audit Specialist 4
Audit Specialist 4 (Supervisory)
Audit Specialist 5
Audit Supervisor 1
Audit Supervisor 2
Audit Supervisor 3
Auditor 1
Auditor 2
Auditor 3
Auditor 3 (Supervisory)
Auditor 4
Auditor 4 (Supervisory)
Auditor 5
Auditor 6
Auditor 7
Aviation Consultant
Budget & Management Analyst 1
Budget & Management Analyst 1 (Management)
Budget & Management Analyst 1 (Supervisory)

Budget & Management Analyst 2
Budget & Management Analyst 2 (Management)
Budget & Management Analyst 2 (Supervisory)
Budget & Management Analyst 3
Budget & Management Analyst 3 (Management)
Budget & Management Analyst 3 (Supervisory)
Building Construction Superintendent 1
Building Construction Superintendent 2
Building Construction Superintendent 3
Chapel Organist
Chaplain 1
Chaplain 2
Chemist Supervisor 1
Chemist Supervisor 2
Chemist Supervisor 3
Chemist 1
Chemist 2
Chemist 3
Chemist 4
Civil Engineer 1
Civil Engineer 2
Civil Engineer 3
Civil Engineer 4
Civil Engineer 4 (Supervisory)
Civil Engineer 5
Civil Engineer 5 (Supervisory)
Civil Engineer 6
Civil Engineer 6 (Supervisory)
Community Services Technologist 1
Community Services Technologist 2
Curator 1
Curator 2
Curator 3
Curator 4
Curator 5
Curator 6
Dietician 1
Dietician 2
Dietician 3
Economist 1
Economist 2
Educational Services Assistant 1 (Confidential/Supervisory)
Educational Services Assistant 2 (Confidential/Supervisory)
Educational Services Assistant 3 (Confidential/Supervisory)
Educational Services Assistant 4 (Confidential/Supervisory)
Educational Services Intern (Confidential/Supervisory)
Educational Services Assistant 1
Educational Services Assistant 1 (Confidential)
Educational Services Assistant 1 (Education)
Educational Services Assistant 1 (Management)
Educational Services Assistant 1 (Supervisory)
Educational Services Assistant 2

Educational Services Assistant 2 (Confidential)
Educational Services Assistant 2 (Education)
Educational Services Assistant 2 (Management)
Educational Services Assistant 2 (Supervisory)
Educational Services Assistant 3
Educational Services Assistant 3 (Confidential)
Educational Services Assistant 3 (Education)
Educational Services Assistant 3 (Supervisory)
Educational Services Assistant 4
Educational Services Assistant 4 (Confidential)
Educational Services Assistant 4 (Education)
Educational Services Assistant 4 (Supervisory)
Educational Services Intern
Educational Services Intern (Confidential)
Educational Services Intern (Education)
Educational Services Intern (Management)
Educational Services Intern (Supervisory)
Electrical Engineer 1
Electrical Engineer 2
Electrical Engineer 3
Electrical Engineer 3 (Supervisory)
Electrical Engineer 4
Electrical Engineer 4 (Supervisory)
Electrical Engineer 5
Electrical Engineer 5 (Supervisory)
Electronics Supervisor 5
Engineering Technician 4 (Supervisory)
Engineering Technician 5 (Supervisory)
Engineering Technician 6 (Management)
Engineering Technician 6 (Supervisory)
Environmental Engineer 1
Environmental Engineer 2
Environmental Engineer 3
Environmental Engineer 4
Environmental Specialist 1
Environmental Specialist 3
Equal Opportunity Officer 1
Equal Opportunity Officer 1 (Management)
Equal Opportunity Officer 1 (Supervisory)
Equal Opportunity Officer 2
Equal Opportunity Officer 2 (Management)
Equal Opportunity Officer 2 (Supervisory)
Equal Opportunity Officer 3
Equal Opportunity Officer 3 (Management)
Equal Opportunity Officer 3 (Supervisory)
Equal Opportunity Officer 4
Equal Opportunity Officer 4 (Management)
Equal Opportunity Officer 4 (Supervisory)
Equal Opportunity Officer 5
Equal Opportunity Officer 5 (Management)
Equal Opportunity Officer 5 (Supervisory)
Equal Opportunity Officer 6

Equal Opportunity Officer 6 (Management)
Equal Opportunity Officer 6 (Supervisory)
Equal Opportunity Officer 7
Equal Opportunity Officer 7 (Management)
Equal Opportunity Officer 7 (Supervisory)
Equal Opportunity Officer 8
Equal Opportunity Officer 8 (Management)
Equal Opportunity Officer 8 (Supervisory)
Equal Opportunity Specialist 3
Fiscal Supervisor 1
Fiscal Supervisor 2
Fiscal Supervisor 3
Fiscal Supervisor 4
Food Production Assistant 3 (Management)
Food Production Manager 1
Food Production Manager 2
Food Production Manager 3
Food Service Administrator 1
Food Service Administrator 2
Health Physicist 1
Health Physicist 2
Health Physicist 3
Landscape Architect 1
Landscape Architect 2
Landscape Architect 3
Landscape Architect 4
Librarian Supervisor 1
Librarian Supervisor 2
Librarian 1
Librarian 2
Librarian 3
Library Associate 1
Library Associate 2
Library Consultant 1
Library Consultant 2
Library Services Supervisor 1
Library Services Supervisor 2
Library Services Supervisor 3
Management Intern
Management Information Supervisor 2
Management Information Supervisor 3
Management Information Supervisor 4
Management Information Supervisor 5
Mechanical Engineer 1
Mechanical Engineer 2
Mechanical Engineer 3
Mechanical Engineer 3 (Supervisory)
Mechanical Engineer 4
Mechanical Engineer 4 (Supervisory)
Mechanical Engineer 5
Mechanical Engineer 5 (Management)
Mechanical Engineer 5 (Supervisory)

Mechanical Engineer 6
Mechanical Engineer 6 (Supervisory)
Medical Records Consultant
Medical Technologist Supervisor 1
Medical Technologist Supervisor 2
Medical Technologist 1
Medical Technologist 2
Medical Technologist 3
Medical Technologist 4
Medical Records Librarian
Metrologist 1
Metrologist 2
Management Information Specialist 1
Management Information Specialist 1 (Confidential)
Management Information Specialist 1 (Management)
Management Information Specialist 2
Management Information Specialist 2 (Confidential)
Management Information Specialist 2 (Management)
Management Information Specialist 3
Management Information Specialist 3 (Confidential)
Management Information Specialist 3 (Management)
Management Information Specialist 4
Management Information Specialist 4 (Confidential)
Management Information Specialist 4 (Management)
Management Information Specialist 5
Management Information Specialist 5 (Confidential)
Management Information Specialist 5 (Management)
Management Information Specialist 6
Management Information Specialist 6 (Confidential)
Management Information Specialist 6 (Management)
Management Information Specialist 7 (Confidential)
Management Information Specialist 7 (Management)
Management Information Supervisor 1
Microbiologist Supervisor 1
Microbiologist Supervisor 2
Microbiologist Supervisor 3
Microbiologist 1
Microbiologist 2
Microbiologist 3
Microbiologist 4
Nursing Clinician
Nursing Instructor 1
Nursing Instructor 2
Nursing Specialist
Nursing Supervisor 1
Nursing Supervisor 2
Payroll & Benefits Supervisor 1
Payroll & Benefits Supervisor 2
Payroll & Benefits Supervisor 3
Personnel Manager 1
Personnel Manager 1 (Supervisory)
Personnel Manager 2

Personnel Manager 2 (Management)
Personnel Manager 2 (Supervisory)
Personnel Manager 3
Personnel Manager 3 (Management)
Personnel Manager 3 (Supervisory)
Personnel Specialist 1
Personnel Specialist 2
Personnel Specialist 3
Personnel Specialist 4
Personnel Specialist 4 (Management)
Personnel Specialist 4 (Supervisory)
Personnel Specialist 5
Personnel Specialist 5 (Management)
Personnel Specialist 5 (Supervisory)
Personnel Specialist 6
Personnel Specialist 6 (Management)
Pharmacist
Pharmacist Supervisor
Planning Analyst 3 (Confidential/Supervisory)
Planning Analyst 3 (Management)
Planning Analyst 4 (Management)
Planning Analyst 4 (Confidential/Supervisory)
Program & Planning Analyst 1
Program & Planning Analyst 1 (Confidential)
Program & Planning Analyst 2
Program & Planning Analyst 2 (Confidential)
Program & Planning Analyst 3
Program & Planning Analyst 3 (Confidential)
Program & Planning Analyst 3 (Confidential/Supervisory)
Program & Planning Analyst 3 (Management)
Program & Planning Analyst 3 (Supervisory)
Program & Planning Analyst 4
Program & Planning Analyst 4 (Confidential)
Program & Planning Analyst 4 (Confidential/Supervisory)
Program & Planning Analyst 4 (Management)
Program & Planning Analyst 4 (Supervisory)
Program & Planning Analyst 5
Program & Planning Analyst 5 (Confidential)
Program & Planning Analyst 5 (Confidential/Supervisory)
Program & Planning Analyst 5 (Management)
Program & Planning Analyst 5 (Supervisory)
Press Relations Officer
Printing Technologist 3 (Management)
Professional Consultant
Program Production Coordinator
Program Coordinator
Program Writer-Producer
Property Manger
Psychologist Consultant
Psychological Services Associate 2
Psychologist 1
Psychologist 2

Psychologist 3
Psychologist 4
Public Health Educator 1
Public Health Educator 2
Public Health Educator 3
Public Information Officer 1
Public Information Officer 2
Public Information Officer 2 (Supervisory)
Public Information Officer 3
Public Information Officer 3 (Confidential)
Public Information Officer 3 (Supervisory)
Public Information Officer 4
Public Information Officer 4 (Confidential)
Public Information Officer 4 (Supervisory)
Publications Editor 1
Publications Editor 2
Publications Editor 3
Publications Editor 4
Publications Supervisor
Purchasing Agent 1
Purchasing Agent 1 (Supervisory)
Purchasing Agent 2
Purchasing Agent 2 (Supervisory)
Purchasing Agent 3
Purchasing Agent 3 (Supervisory)
Purchasing Agent 4 (Supervisory)
Purchasing Agent 5 (Supervisory)
Radiation Consultant
Real Estate Agent 1
Real Estate Agent 2
Real Estate Agent 3
Recreation Director
Recreation Leader 1
Recreation Leader 2
Registered Nurse 1
Registered Nurse 2
Registered Nurse 3
Registered Nurse 3 (Confidential)
Registered Nurse 4
Registered Nurse 4 (Confidential)
Research Analyst 1
Research Analyst 1 (Confidential)
Research Analyst 2
Research Analyst 2 (Confidential)
Research Analyst 3
Research Analyst 3 (Confidential/Supervisory)
Research Analyst 3 (Confidential)
Research Analyst 3 (Supervisory)
Research Analyst 4
Research Analyst 4 (Confidential/Supervisory)
Research Analyst 4 (Confidential)
Research Analyst 4 (Management)

Research Analyst 4 (Supervisory)
Research Analyst 5
Research Analyst 5 (Confidential/Supervisory)
Research Analyst 5 (Confidential)
Research Analyst 5 (Management)
Research Analyst 5 (Supervisory)
Research Analyst 6 (Confidential/Supervisory)
Research Analyst 6 (Confidential)
Research Analyst 6 (Management)
Research Analyst 6 (Supervisory)
Research Analyst 7 (Confidential)
Research Analyst 7 (Supervisory)
Research Analyst 8 (Confidential)
Research Analyst 8 (Supervisory)
Research Scientist 1
Research Scientist 2
Research Scientist 3
Research Scientist 4
Resource Development Specialist
Safety Coordinator 1
Social Worker 1
Social Worker 2
Social Worker 3
Soil Scientist
Specifications Writer 1
Specifications Writer 3
Supervising Therapist 1
Supervising Therapist 2
Teacher 1
Teacher 2
Therapies Consultant
Therapist 1
Therapist 2
Therapist 3
Training Officer 1 (Confidential/Supervisory)
Training Officer 2 (Confidential/Supervisory)
Training Officer 3 (Confidential/Supervisory)
Training Officer 1
Training Officer 1 (Confidential)
Training Officer 2
Training Officer 2 (Confidential)
Training Officer 3
Training Officer 3 (Confidential)
Veterans Counselor 1
Veterans Counselor 2
Veterinarian 1
Vocational Rehabilitation Counselor 1
Vocational Rehabilitation Counselor 2
Vocational Rehabilitation Counselor 3
Vocational Rehabilitation Specialist 1

APPENDIX C

SURVEY RETURN RATE BY INSTITUTION

SURVEY RETURN RATE BY INSTITUTION

	<u>Surveys Sent</u>	<u>Surveys Returned</u>	<u>% Return</u>
UW-Eau Claire	4	2	50%
UW-Green Bay	6	4	66%
UW-La Crosse	7	6	86%
UW-Madison	266	121	45%
UW-Milwaukee	70	33	47%
UW-Oshkosh	19	9	47%
UW-Parkside	12	6	50%
UW-Platteville	2	2	100%
UW-River Falls	6	4	66%
UW-Stevens Point	9	4	44%
UW-Stout	7	4	57%
UW-Superior	6	3	50%
UW-Whitewater	16	8	50%
	<hr/> 430	<hr/> 206*	

*Note: One respondent did not identify his or her institution.

APPENDIX D
SURVEY INSTRUMENT

MPMCP

This survey, Minority Perceptions of Mentoring and Career Progression, is an adaptation of Dr. Cynthia Greer's STOW-Form II (Status of Women-Form II).

The purpose of this survey is to gather information for my thesis concerning minorities' perceptions of race, sex, and mentorship on career progression by minorities holding executive/administrative/managerial and professional non-faculty positions in the University of Wisconsin System. This information will be held in strict confidence. Names of respondents and their institutions will not be reported. Only the group data will be reported.

For purposes of knowing if all UW System schools have respondents and can be included in the study, at which institution are you currently employed?

- | | | |
|--|---|--|
| <input type="checkbox"/> UW-Eau Claire | <input type="checkbox"/> UW-Oshkosh | <input type="checkbox"/> UW-Stout |
| <input type="checkbox"/> UW-Green Bay | <input type="checkbox"/> UW-Parkside | <input type="checkbox"/> UW-Superior |
| <input type="checkbox"/> UW-La Crosse | <input type="checkbox"/> UW-Platteville | <input type="checkbox"/> UW-Whitewater |
| <input type="checkbox"/> UW-Madison | <input type="checkbox"/> UW-River Falls | |
| <input type="checkbox"/> UW-Milwaukee | <input type="checkbox"/> UW-Stevens Point | |

A. Title or position _____

B. What is the length of your contract?

- Academic year
 Annual

C. What is your percentage of appointment?

%

D. What is your race/ethnic background?

- American Indian or Alaska Native
 Hispanic
 Black
 Asian or Pacific Islander
 Other: _____

E. What is your sex?

- Male Female

F. In which category is your age?

- Less than 25
 26-35
 36-45
 46-55
 56 or above

G. What is the highest academic degree you have earned?

- Associate degree
 Bachelor's degree
 Master's degree
 Doctoral degree
 Other: (specify) _____

H. How long have you been in your current position?

- | | |
|---|---|
| <input type="checkbox"/> Less than one year | <input type="checkbox"/> 10 to 14 years |
| <input type="checkbox"/> 1 to 4 years | <input type="checkbox"/> 15 to 19 years |
| <input type="checkbox"/> 5 to 9 years | <input type="checkbox"/> 20 years or more |

I. How many professional staff members report directly to you? (i.e., you are the immediate supervisor)

- | | |
|--|---|
| <input type="checkbox"/> none | <input type="checkbox"/> 9-15 staff members |
| <input type="checkbox"/> 1-3 staff members | <input type="checkbox"/> 16 or more staff members |
| <input type="checkbox"/> 4-8 staff members | |

J. What is your present annual salary (before taxes)?

- | | |
|--|--|
| <input type="checkbox"/> \$10,000-\$14,999 | <input type="checkbox"/> \$40,000-\$49,999 |
| <input type="checkbox"/> \$15,000-\$19,999 | <input type="checkbox"/> \$50,000-\$59,999 |
| <input type="checkbox"/> \$20,000-\$29,999 | <input type="checkbox"/> \$60,000 or above |
| <input type="checkbox"/> \$30,000-\$39,999 | |

K. What three major factors influenced your decision to pursue a career in higher education?

1. _____
2. _____
3. _____

L. From the list below, please indicate the three factors that were the most helpful in the advancement of your career. (1 is most helpful, 2 is second most helpful, 3 is third most helpful).

- _____ Proper credentials
- _____ Encouragement from family
- _____ Being in the right place at the right time
- _____ Having a mentor who assisted in my professional development
- _____ Being physically attractive
- _____ Being assertive
- _____ Receiving formal career counseling
- _____ Knowledge gained in educational programs or workshops
- _____ Having strong drive and determination
- _____ Intelligence
- _____ Contacts in the right places
- _____ Having a good personality
- _____ Being competent
- _____ Other: (specify) _____

For the purpose of this study, the term mentor will be defined as: A trusted and experienced supervisor or advisor who has personal and direct interest in the development and/or education of a younger or less experienced individual, usually in professional education or professional occupations. The mentor/protégé relationship can be either formal or informal.

M. At any point in your career, have you had one or more mentors? (See definition above)

- _____ No
- _____ Yes

If you answered no, please skip to question O.

N. If you have had one or more mentors during your career, what was the mentor's sex?

- _____ Male
- _____ Female
- _____ I have had mentors of both sexes

O. If you have had one or more mentors during your career, what was the mentor's age in relation to your age? (Mark an "X" for each mentor you have had beside each appropriate age group)

- _____ More than 10 years younger than me
- _____ 4-10 years younger than me
- _____ Between 2 years younger and 2 years older than me
- _____ 4-10 years older than me
- _____ More than 10 years older than me

P. If you have had one or more mentors during your career, what was the mentor's racial/ethnic background? (Mark an "X" for each mentor you have had beside each appropriate ethnic/minority group)

- _____ American Indian or Alaska Native
- _____ Hispanic
- _____ Black
- _____ Asian or Pacific Islander
- _____ White
- _____ Other: _____

Q. If you have had one or more mentors during your career, what was the mentor's title/position? (Please write the mentor's title, then indicate the person's race and sex)

- | | Title | Race | Sex |
|----|-------|------|-----|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |

R. Would you prefer having a mentor of the same sex as yourself?

- Yes, I would prefer to have a mentor of the same sex as myself
- No, I would prefer to have a mentor of the opposite sex
- I have no preference in the sex of my mentor

Please comment: _____

S. Would you prefer having a mentor of the same racial/ethnic background as yourself?

- Yes, I would prefer to have a mentor of the same racial/ethnic background as myself
- No, I would prefer to have a mentor of a different racial/ethnic background (specify): _____
- I would prefer to have a minority person as a mentor, but their racial/ethnic background would not have to be the same as mine
- I have no preference as to a mentor's racial/ethnic background

Please comment: _____

T. In general, do you perceive being a minority has: (check one)

- had a negative effect on my career advancement
- had a positive effect on my career advancement
- had neither a positive nor negative effect on my career advancement.

Please comment: _____

U. In general, do you perceive your sex has: (check one)

- had a negative effect on your career advancement
- had a positive effect on your career advancement
- had neither a positive nor negative effect on your career advancement.

Please comment: _____

V. What do you perceive as having the greatest impact on your career? (check one)

- Your sex
- Your race
- If neither, what did? _____

W. What advice would have been helpful to you in beginning your career?

Thank you for responding to this questionnaire. Please return the questionnaire in the enclosed stamped envelope within seven days.

APPENDIX E
CORRESPONDENCE

... of some of your ...

... (no attachment)

...

...

...

...

...

... in writing story



University of Wisconsin - La Crosse

La Crosse, Wisconsin 54601

(608) 785-8000

October 11, 1988

name
title
university
city

Dear firstname

Within the next week or so you will receive a phone call from Ellen Dowell, a University of Wisconsin-La Crosse College Student Personnel graduate student asking you to assist her by distributing questionnaires to some of your minority staff members.

Ms. Dowell wishes to investigate the mentor relationship and the advancement of minorities in the UW System for her master's thesis. We all know the difficulties involved in releasing names and addresses of minority staff, so the only solution I could think of was to recommend that she contact you and ask for your assistance. I have tried to alert Ms. Dowell to the fact that for some of you this will not be an easy task. On the other hand, I assured her that you are all "great folks" who will help her if you can. I hope you can--she's a serious, hard-working student.

Thanks in advance for your help. I hope your fall semester is moving along smoothly.

Sincerely,

Julie A. Sichler, Director
Affirmative Action

JAS:sr

cc: Ellen Dowell ✓



November 18, 1988

I am a graduate student in College Student Personnel at the University of Wisconsin-La Crosse. I am in the process of surveying the thirteen universities in the University of Wisconsin System for my thesis which explores minorities' perceptions of race, sex, and mentorship on career progression of minorities in the UW System holding executive/administrative/managerial and professional non-faculty positions.

My study ties in well with the Design for Diversity and I would like to share my findings in hopes that the information will be used to benefit the system. By sharing the information on factors that minorities perceive to have affected their career advancement, I hope to create a greater understanding that would improve career progression possibilities for minorities. I also hope that this study will prompt further research on the topic.

The majority of the universities in the UW System have few minorities in the two categories listed, and this creates a risk of having no respondents from the smaller institutions. Please keep in mind that if an institution has no respondents, I will be unable to include that institution in the study.

I need your help to assure an adequate return rate. I would appreciate it if you would complete the survey and return it in the stamped envelope within one week. I assure you of complete anonymity in your responses-- only group data will be reported. Your cooperation will be greatly appreciated. If you are interested in my findings, I will be sending each participating Affirmative Action Officer a summary of the results during spring semester.

Ellen M. Dowell

Ellen M. Dowell
CSP Student

Jennifer B. Wilson

Jennifer B. Wilson
Thesis Chairperson



date

name
title
institution
city, state, zip code

Dear firstname:

Enclosed you will find the number of surveys we concluded that your institution will need to reach all minorities in category 1 (executive/administrative/ managerial) and category 3 (professional non-faculty) according to Minorities in the Workforce, 1987.

To refresh your memory concerning who is included in each category, please refer to page seven of EEO-6. Also, to clear up questions some of you had about whether minority faculty should be included, minorities who hold faculty positions only are not to be included. They should be included if a percentage of their appointment is teaching in addition to a category 1 or category 3 position. If you have other questions concerning who should be included or if you need more surveys, please do not hesitate to call me at 608/785-8866.

Each sealed envelope contains a survey, a stamped self-addressed envelope, and a cover letter explaining my study. We discussed that you would attach the appropriate address labels and send the surveys through campus mail to the designated individuals. Please try to have them sent out within a few days after returning from Thanksgiving Break. With the rush of the Christmas season quickly approaching, timing is crucial in order to gain an adequate return rate.

I feel that my study has the potential of being very useful to the system and I will send a copy of my results to your office during spring semester. I would like to sincerely thank you for your help in distributing my survey instrument.

Sincerely,

Ellen M. Dowell
CSP student