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Cross-racial/Cross-gender Mentoring of School Administrators

Zella M. Williams
University of Missouri-St. Louis

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We hereby recommend that the dissertation by:

ZELLA M. WILLIAMS

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Be accepted in partial fulfillment of the requirements for the degree of:

Doctor of Education

Dr. Kathleen Sullivan-Brown
Chairperson

Dr. Lynn Beckwith, Jr.
Committee Member

Dr. Cody Ding
Committee Member

Dr. Carole Murphy
Committee Member

Abstract

The purpose of this study is to determine the perceived effectiveness of the professional mentoring which female African American school administrators and other school administrators have received from their school district, examining the cross-racial and cross-gender pairings of mentors and mentees. After an extensive review of the literature, a cross-sectional, self-reporting attitudinal survey was designed. The survey began with a section of closed-ended questions to gather demographic information. The second section gathered information about the mentoring experience using a Likert scale. The final section consisted of one open-ended question about mentoring effectiveness. The survey was distributed to all certified and non-certified administrators in a large Midwestern school district who participated in a district-led formal mentoring program. Seventy percent of the administrators completed and returned the survey.

The results of the survey indicate no significant differences in perceived mentoring impact in cross-racial or cross-gender pairs of mentors and mentees. This is important for school districts which face increasingly diverse staff and student populations in the future.

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Chapter 1

Introduction to the Study

Introduction

Mentoring is generally considered to be a relationship between an experienced person and a less experienced person in which the more experienced person helps the less experienced person cultivate needed skills. Mentoring has existed as long as people have lived in societies and has a long and rich history as described throughout the literature (Bardondess, 1995; Colley 2002; Nefstead and Nefstead 1994, Roberts 1999).

In the late twentieth century and early twenty-first century, a body of literature on mentoring theory and research began to accumulate. The seminal work of Levinson, Darrow, Klein, Levinson, and McKee (1978) on the developmental stages of a man's career established the need for mentoring relationships in young men's adulthood. Through biographical interviews, Levinson, et al. (1978) identified five functions of being a mentor: (1) enhancing skills and intellectual development; (2) sponsoring the mentee's entry and advancement; (3) welcoming him into his new world and teaching him its values, customs, resources, and role players; and (4) serving as an exemplar. The authors identified the fifth and most important function as believing in, supporting, and facilitating the realization of the mentee's dream. According to Colley (2003), over the last 20 years, mentoring has become a major feature of initial education and continuing professional development in contexts ranging from business management to teaching. Eddy, Tannebaum, Alliger, D'Abate, and Givens (2001) noted that many major U.S. companies have formal mentoring programs in place to help them attract, retain, and

develop high performing employees. Research beginning in the 1980's indicates the importance of mentors, stating that mentors may be the single most important factor in the career development of college academic administrators (Eberspacher and Sisler, 1988; Moore, 1982).

The institutionalization of mentoring in education in the United States is reflected in the literature and reported experiences of mentoring leaders. According to the American Association of State Colleges and Universities (AASCU) (2006), K-12 teacher mentoring programs have grown exponentially in recent decades. In 1990-91, 40% of new K-12 teachers participated in some kind of mentoring program; by 2006, 80% of new teachers participated. AASCU identifies the New Teacher Center at the University of California, Santa Cruz, as one of the leaders in the field of teacher mentoring. AASCU studies show that 30 or more states have some form of mandated mentoring program, although only 16 states finance the mentoring. Sullivan-Brown (2002) noted that in Missouri, the Outstanding Schools Act of 1993 provided for an environment of innovation that enabled her to spend five years as the staff development professional involved in the design and implementation of mentoring programs statewide.

Mentoring in education has become so institutionalized that it is sometimes a source of additional compensation. AASCU (2006) found that nine states provided some form of compensation, while seven other states compensated teachers for mentoring by providing them release time. Shollen, Bland, Taylor, Weber-Main, and Mulcahy (2008) maintained that educational leaders should compensate mentors for the time that they spend mentoring, and that it should be included in annual reviews, salary decisions, and

promotion decisions. The Missouri Department of Elementary and Secondary Education (MODESE), as well as the education department of other states, has extended mentoring beyond teachers to include administrators. The Missouri Department of Elementary and Secondary Education has initiated *A Mentoring Program for New Administrators (AMP)* (Schlimpert, T., 2008) that consists of some of the same components recommended by Shollen, et al (2008), including monetary compensation and goal setting.

Effectiveness of Mentoring

Thus, an extensive practice of mentoring in education has evolved based on intuition, theory, and tradition. The growing body of literature about mentoring in education has yielded much theory and little research to show its effectiveness. Gardenswartz and Rowe (1998) called mentoring a proven way to develop talent even while they conceded that the research proving the effectiveness of mentoring is scant. As recently as 2006, Allen, Eby, and Lentz agreed with Gardenswartz and Rowe (1998) that little research exists to show the effectiveness of mentoring; yet they noted that books and articles explaining how to mentor continue to proliferate. Earlier studies (Douglas, 1997; Gibb & Magginson, 1993) focused on the design of formal mentoring programs. Gibb suggested that the purpose of mentoring may be gaining employee commitment, rather than meeting the needs of the protégé (p. 53). In observations of mentor teachers, Feiman-Nemser, Parker & Zeichner (1993) found that they either consciously or unconsciously guided the new teachers to become like themselves. In their observations, the mentor teachers had little knowledge of or appreciation for the prior knowledge or culture of the students.

Within the past ten years, some research has accumulated attesting to the value of mentoring in education. A study by Ragins, Cotton, and Miller (2000) examined the relationship between job and career attitudes and the presence of a mentor, the mentor program type (formal or informal), the quality of the mentoring relationship, and the perceived effectiveness and design of a formal mentoring program. Mentee satisfaction with the quality of a mentoring relationship had a stronger impact on job and career attitudes of the mentee than any of the other factors reviewed. Interestingly, women with formal mentors were less satisfied with their formal mentoring programs than their male counterparts, and these women reported less career commitment than formally mentored men and non-mentored men and women. Another measure of the success of a mentoring relationship is the perceived effectiveness of the relationship to the protégé. Allen, Eby, & Lentz (2006) systematically examined how the design of formal mentoring programs relates to their perceived effectiveness. They examined the effects of mentor commitment and program understanding on protégé satisfaction with the program and found that those two variables had a significant impact on protégé satisfaction. Allen, Eby, & Lentz (2006) further asserted:

> Participant-perceived program effectiveness is important for several reasons. Perceptions of program effectiveness likely play a large role in determining whether or not individuals will continue in the program, if others will sign up for the program, and ultimately whether or not the program continues. (p.126)

In a recent study, Villar and Strong (2007) conducted a benefit-cost analysis of a comprehensive mentoring program for beginning teachers in a medium-sized California

school district. They found that the greatest benefit came from increasing teacher effectiveness. In districts with intensive new teacher induction programs, beginning teachers resemble fourth-year teachers in terms of student achievement as measured by standardized tests. Villar and Strong stated that the cost-benefit of increasing teacher effectiveness was 47%, while the cost-benefit of reduced teacher attrition was 17%. They calculated that new teachers received a return of $3.61 per dollar spent on education; the district received a return of $1.88 per dollar on their hiring costs; and the state received a return of $.98 on its original investment. After five years, they determined that society saw a return of $1.66 for every dollar spent.

A similar cost-benefit analysis of the effects of mentoring school administrators is not available in the literature. Alsbury and Hackmann (2006) found that mentoring models for school administrators did not begin to emerge until the late 1980s and early 1990s. However, Devita, Colvin, Darling-Hammond, and Haycock (2007) found that no effective school reform occurred without strong leadership. In their study of exemplary school leadership programs, Darling-Hammond, LaPointe, Meyerson, Orr, and Cohen (2007) found that every exemplary program had a strong mentoring component. In addition, in a review of state legislative efforts to provide mentoring and other training for school administrators, Shelton (2010) declared that investing in school leadership is a cost-effective way to improve teaching and learning.

Need for Cross-race and Cross-gender Mentoring

Tradition in elementary and secondary education has resulted in a predominance of White males in administration. For example, Glass, Bjork, and Brunner (2000), in

their study of *The American Association of School Administrators Annual Report*, found the following numbers in the superintendency: 1,953 male, 297 female, 114 minority (people of color), and 2,112 non-minority (European American). Other top administrative positions share the same predominance of White males. As the K-12 minority school population continues to grow, practitioners and researchers (Gajda & Militello, 2008; Kearney, 2008) cite a need for a growing population of successful minority educators. A dilemma of how to hire and retain minority administrators is a corollary issue.

A small body of literature addresses that corollary issue. Lindsay (1994) stated that professional development, education, and mentoring programs for gender and racial minorities will help to remedy the exclusionary practices that exist in educational administration and will help female racial minorities to succeed in educational administration. Enomoto, Gardiner, and Grogan (2000) agreed that if mentoring is to be considered useful for women and minorities, the relationship must help them in negotiating through predominantly White male administrations. They also found that it was important to mentees that their mentors believe in them, care about their success, and have a nurturing relationship with them.

The field of education will benefit from the success of female administrators since administration based on feminist or humanist practices has proven to be effective in K-12 administration. Sadker, Sadker, and Klein (1991) identified the following valued feminist or humanist practices as particularly effective in school district administration: concern for others; a greater focus on teaching and learning; a democratic, participative

style; greater effectiveness in representing the school and working with the community; greater emphasis on using outside resources for new ideas to improve instruction; and increased attention to monitoring student participation and measuring student learning. Later research by Shakeshaft, Irby, Brown, Grogan, & Ballenger (2007) found five components of leadership behaviors that are common for women leaders: social justice, spiritual leadership, relational leadership, instructional focus, and striving for balance. Shakeshaft (in press) identified three of these components as having implications for educational change – commitment to social justice, relationship orientation, and commitment to instruction and learning. Clearly, there is a need beyond equity issues to increase the number of female administrators. Increasing the number of female administrators will definitely address the lack of equity in the ranks of female administrators. It will also benefit students because of commitment to instruction and learning and commitment to social justice.

According to Brunner and Grogan (2007) and Melendez de Santa Ana (2008), female superintendents found that it was necessary to be mentored into the superintendency. With the need to improve our public school system with leaders who have qualities found in female administrators of color (Brunner & Grogan, 2007; Haar & Robicheau, 2009; Johnson, 1998), it is important to determine what makes a mentoring experience effective for female African American educational administrators. As Gardiner, Enomoto, and Grogan (2000) suggested, those in the field of education need to work toward "pluralistic schools and society unconstructed by gender and race" (p. 9) because the androcentric, White male-identified, norms of schools have served to limit

both school leadership and student experiences. Crawford and Smith (2005) found that even in the 21st century, college and university faculties and administrators do not come close to reflecting American's racial and class diversity. The same is true of K-12 public school faculties and administrators. For example, according to Planty, et al. (2009) of the National Center for Education Statistics, the percentage of African American students in the nation's public schools was 17% as of 2007, the latest year for which statistics are available. According to the U. S. Bureau of Labor Statistics, in 2009, the percentage of African American education administrators in all positions was 10.7%, and the percentage of African American teachers, librarians, and other educators was 9.2%. As Crawford and Smith (2005) noted, recruiting minorities into the teaching profession is not sufficient to solve the problem. They maintained that change is needed to enhance the participation of minorities in their schools, yet noted that mentoring is lacking for minorities.

Effectiveness of Cross-race and Cross-gender Mentoring

Although a small body of literature is forming that seeks to establish the effectiveness of mentoring, there are many areas in which the effectiveness of mentoring has not yet been examined. In view of the need for female and minority educational administrators, there is a need to bolster the theory about mentoring with research that also examines the effectiveness of mentoring for minority groups and women. While research is accumulating about the effectiveness of mentoring, research considering the effect of race and gender is still in its infancy. In a survey of literature, Blake-Beard, Murrell, and Thomas (2007) found that in most studies, race is either excluded as a factor

or samples are used that lack diversity.

The available literature is mixed on the topic on whether matching the race and gender of the mentor and mentee is likely to predict a positive mentoring relationship. According to Papelweis (1991):

> Literature specific to race or ethnicity in mentoring relationships indicate that (1) Grooming-mentoring works best if the relationship is homogenous; (2) Homogeneity is hard to attain because finding mentors poses special problems for the culturally diverse; (3) Some researchers have acknowledged that mentoring may have greater impact on the careers of Blacks; (4) Mentors of the same ethnicity as their protégés appear to be more sensitive regarding career development issues; and (5) Minority protégés prefer members of the same ethnicity or Caucasians as mentors. (pp. 9-10)

However, the African American women in the study by Allen, Jacobson, & Lomotey (1995) stated that the race or gender of a mentor or sponsor was unimportant to them. In interviews conducted by Wilcox (2002), some respondents indicated that race was a factor, while others indicated that it was not. While studying the effects of mentor commitment and program understanding, Allen, Eby, and Lentz (2006) found that race and ethnicity did not account for significant variance on the perceived effectiveness of mentoring by either the mentor or the protégé. In a qualitative study, Stanley and Lincoln (2005) found that cross-race mentoring requires extra sensitivity. They stated that successful mentoring is "characterized by trust, honesty, a willingness to learn about self and others, and the ability to share power and privilege" (p. 46).

Purpose of the Study

The purpose of this study is to determine the influence of race and gender on the perceived effectiveness of the professional mentoring that female African American school administrators and other school administrators have received in their school districts.

Is it important for female and minority educators to have mentors from the same gender and race? This study adds to the research on mentoring across racial and gender lines in the field of education. It examines the experiences of female and African American mentees and compares them to the experiences of all other mentees. The study uses the following definition of minority: "a racial, religious, or other group regarded as different from the group of which it is a part" (*American Heritage College Dictionary*, 1993, p. 869). The study focuses on African American administrators because that is the minority most prevalent in the Midwestern district from which the sample was drawn. It was devised to determine whether there is any perceived difference in the mentoring experience of female African American administrators and the mentoring experience of other school administrators.

Because of the high percentage of African American students in the schools in the study, the District had been actively recruiting and developing African American teachers and administrators under the leadership of the previous superintendent. The District's formal mentoring program provided each new administrator with an assigned mentor; therefore, the program presented an excellent opportunity to examine the effect of mentoring on the mentees.

Research Questions and Hypotheses

In order to assess the perceived effectiveness of the professional mentoring experiences of female African American school administrators and other school administrators, the following research questions were developed.

1. Does the composition of gender pairing (same or opposite gender) make any difference in whether school administrators with same-race mentors perceive their mentoring experiences to be as effective as that of school administrators with cross-race mentors?
2. Does the composition of racial pairing (same or different race) make any difference in whether school administrators with same-gender mentors perceive their mentoring experiences to be as effective as that of school administrators with cross-gender mentors?
3. Do female African American school administrators perceive their professional mentoring experiences to be as effective as other school administrators do; do they perceive that their mentors treat them with as much respect as the mentors of other school administrators do; and do they trust their mentors as much as other school administrators trust their mentors?

In order to test the significance of the perceived effectiveness of the professional mentoring experiences of female African American school administrators and other school administrators, the following null hypotheses were created.

1. There is no significant difference by mentee gender in the perceived effectiveness of the professional mentoring experiences of school

administrators who have same-race mentors and that of school administrators who have cross-race mentors.

2. There is no significant difference by mentee race in the perceived effectiveness of the professional mentoring of school administrators who have same-gender mentors and that of school administrators who have cross-gender mentors.
3. There is no significant difference in the perceived effectiveness of the professional mentoring experience, reported mentor respect, and expressed trust in the mentor of female African American school administrators and the perceived effectiveness of the professional mentoring experience, reported mentor respect, and expressed trust in the mentor of other school administrators.

Delimitations of the Study

The delimitations of the study relate to the scope of the study. The subjects in the study were the certified and non-certified administrators in one large Midwestern Pre-K through Grade 12 school district during one school year. A limitation of the study is that participation was voluntary. People with more positive attitudes may be more likely to complete and return a survey. Therefore, they are more likely to self-report positive outcomes. The self-reporting process is another limitation. Although self-reporting may limit investigator bias or inaccurate observations, respondents may not remember accurately, or they may report data in a way that they think will be pleasing or socially acceptable. All data in the study was obtained through self-reporting, with no

verification of the self-reported data.

Assumptions

The study is based on the following assumptions. The subjects in the study are assumed to be representative and typical of other female African American school administrators. Another assumption is that the self-reporting is accurate.

Definitions

According to Kochan (2002, p. 784), "Successful mentoring involves having two or more individuals willingly form a mutually respectful, trusting relationship focused on goals that meet the needs and foster the potential of the mentee, while considering the needs of the mentor, and the context in which they both must function." Wickman & Sjodin (1997, p. 3) state that "A mentor is someone who has experienced what you are trying to learn." Hill & Ragland (1995) stated that "mentors guide, train, and support a less skilled or experienced person called a novice, mentee, or protégé" (p.72). However, for purposes of this study, a more specific definition is needed. Therefore, "mentor" is defined using the terms of Allen, Jacobson, and Lomotey (1995): "Someone who provides counsel and moral support for an aspiring administrator" (p. 410). This study will use the definition from Hill & Ragland (1995) for mentee/protégé: "A less skilled or experienced person who receives guidance, training, and support" (p. 72).

In their groundbreaking work, Kram and Isabella (1985) distinguished between traditional mentoring, in which there are significant differences in age and in hierarchical levels, and peer mentoring, in which age and/or hierarchical levels may be the same. Another distinction was that traditional mentors engage in a one-way exchange of help,

while peer mentors may engage in a two-way exchange. Sullivan-Brown (2002) identified two additional categories: assigned mentoring and group mentoring. Sullivan-Brown found that assigned mentoring was often perfunctory and involved more orientation than real professional mentoring. She also found that group mentoring was less effective than other forms of mentoring because of the lack of small-group processing, feedback, evaluation, and follow-up, which should be part of the mentoring process and is almost always lacking in group mentoring situations. This study does not include group mentoring because group mentoring was not a structure used in the district from which the data was collected. This study does not make a distinction between traditional mentors and peer mentors, nor between assigned and unassigned mentors.

While job promotions have occurred for some individuals in the study, the study does not assume that a promotion is a requisite in order for mentoring to be considered effective. In fact, no item on the survey related to job promotion. As Allen, Eby, Poteet, Lentz, and Lima (2004) found in their meta-analysis of 43 individual studies:

> These results suggest that the most consistent benefits of mentoring may be the impact on affective reactions to the workplace and positive psychological feelings regarding one's career. This may not be too surprising when considering that objective outcomes such as promotion and salary are more reliant on outside influences than are processes internal to the individual, such as career and job attitudes. That is, salary increases and promotions can also be contingent on the financial solvency and hierarchical structure of the organization in which the employee works. In addition, it may take a greater amount of time for objective

> benefits to accrue than for affective reactions such as job satisfaction to be impacted by a mentoring experience. (Allen, Eby, Poteet, Lentz, and Lima, 2004, pp. 132-133)

According to Johnson (2002), the primary mentor is one with whom the protégé has an enduring and bonded relationship, often lasting for several years. For purposes of this paper, the primary mentor is the person that the mentee/protégé deems the most important mentor.

According to Boags (2008), formal mentoring is a mentoring program established by the district or another organization, whereas informal mentoring occurs spontaneously, and hybrid mentoring combines spontaneous and formal mentoring. Johnson (1998) described the formal mentoring process as a formal agreement between mentors and protégés to be completed within a structured time frame, with evaluation of the protégé's experiences, and usually initiated by the protégé. On the other hand, according to Johnson (1998), informal mentoring does not require an agreement between mentors and protégés, nor any time frame or expectation of evaluation of their experiences. This study includes both formal and informal mentoring.

This study will use the definitions listed below.

Mentor: "Someone who provides counsel and moral support for an aspiring administrator" (Allen, Jacobson, and Lomotey, 1995, p. 410).

Mentee/Protégé: "A less skilled or experienced person who receives guidance, training, and support" (Hill & Ragland, 1995, p. 72).

Primary mentor: The person that the mentee/protégé deems the most important mentor.

Effective mentoring: A mentoring experience that the mentee finds effective after reflecting on all aspects of the mentoring experience. Effective mentoring is based on a strong relationship and on attending to all mentoring functions (Levinson, 1978; Kram, 1985; Murrell, 2007; Stanley & Lincoln, 2005).

Formal mentoring: A mentoring program established by a third party in the district.

Informal mentoring: A relationship that evolves spontaneously between two people.

Hybrid mentoring: A combination of formal and informal mentoring (Boags, 2008).

Educational administrator: An educational leader whose responsibilities include supervising programs or personnel in the district.

People/Women of color: People or women from the following racial groups: Asian, Black, Hispanic, Native American, Pacific Islander (Brunner and Grogan, 2007).

Minority group: any group, especially a racial or ethnic group, occupying a subordinate position in a community

Organization of the Study

This research is presented in five chapters, beginning with the introduction in Chapter One. Chapter Two is the review of the literature, and Chapter Three discusses

procedures. Research findings are discussed in Chapter Four; and Chapter Five covers the summary, conclusions, and recommendations.

Chapter 2

Review of Literature

The researcher conducted an exhaustive review of the literature on mentoring, including references on mentoring in business, medicine, and other non-educational sources. The researcher also examined references about mentoring in other countries. This chapter reviews the literature using journal articles, books, book chapters, and the Internet.

Historical Overview

Mentoring has existed as long as people have lived in societies. Early mentors passed on information needed for survival and left a written record with drawings on cave walls. Boags (2008) reminded us in her book, *Mentorship: A Pathway to Career Success*, that the origin of the term mentor derived from a figure in Greek mythology, "Mentor." Mentor's role as a teacher, coach, and guardian is told in the tales of Odysseus and his exploits (p. xv). Nefstead and Nefstead (1994) stated that historical records show that Odysseus learned skills, culture, and values in preparation for manhood through this relationship. Eliot (1980) examined the famous mentoring relationship from antiquity of Socrates and Plato. And of course, The Gospels According to Matthew, Mark, Luke, and John, (*Holy Bible, Revised Standard Edition*) chronicled the mentorship of the disciples by Jesus, who lovingly accepted them as they were, yet exhorted them to high standards with his teaching and with the way that he lived his own life.

Nefstead and Nefstead (1994) also pointed out that in the Middle Ages, craft guilds provided mentoring. Young men were apprenticed to master craftsmen working in

specific professions such as merchandising, law, or goldsmithing. Mentoring others is thought to be a natural human desire as described by Keith, who stated in *The Case for Servant Leadership* (2008): "Serving others is a fundamental, universal human value. It is emphasized in the teachings of the world's great religions, as well as in statements by many respected thinkers and leaders" (p. 2).

Roberts (1999) and others claimed that it is thanks to Fenelon, and the "age of enlightenment," that the modern day allusions of the word *mentor* were brought into the language at all. Roberts states that it is Fenelon's Mentor from the novel of instruction *Les Adventures de Telemaque*, not Homer's, that should be referred to when considering the popular connotations that the word "mentor" now implies. Indeed, a close reading of *The Odyssey* (Homer, 800B.C./1990) reveals that it was the goddess Athena, rather than Mentor himself, who did most of the mentoring while disguised as Mentor. As Ragins and Kram (2007) stated, this disguise created a mythological archetype which combines both male and female qualities. Ragins and Kram (2007) further stated, "mentoring is no myth; it is a very real relationship that has been an integral part of social life and the world of work for thousands of years" (p. 4).

The Modern Age of Mentoring

In the late twentieth century and early twenty-first century, literature on mentoring theory and research began to accumulate. As Helen Colley wrote in 2003, mentoring is the "in" thing. Over the last 20 years, it has become a major feature of initial enculturation and continuing professional development in contexts ranging from business management to teaching. One of the early studies containing interviews of three

successful business executives appeared in the 1978 *Harvard Business Review* with a title proclaiming "Everyone Who Makes It Has a Mentor" (p.89-101). Research beginning in the 1980's indicated the importance of mentors, stating that mentors may be the single most important factor in the career development of college educational administrators (Eberspacher and Sisler, 1988; Moore, 1982). Noe (1988b) noted in the early 1980s that the number of mentoring relationships available to women did not appear to be keeping pace with the increasing number of women wishing to advance in management positions and therefore needing mentors. Gardenswartz and Rowe (1998) called mentoring a *proven* way to groom talent, while they paradoxically conceded that the research proving the effectiveness of mentoring was scant.

In an overview of mentoring research of the late 1970s and early 1980s, Noe (1988b) found that the majority of mentorships were informal, defining informal mentorships as the result of two people interested in establishing a relationship. Noe defined formal mentoring programs as programs in which the organization assigned or matched mentors and protégés and noted that formal mentoring programs were increasing in popularity.

Mentoring Functions

In her seminal work, Kram (1983, 1985) identified the two major functions of mentoring as vocational and psychosocial support. She described the career functions as those aspects of the relationship that primarily enhance career advancement and included sponsorship, exposure and visibility, coaching, protection, and challenging assignments among those functions. She described the psychosocial functions as those that primarily

enhance sense of competence, clarity of identity, and effectiveness in the managerial role and included role modeling, acceptance and confirmation, counseling, and friendship among those functions. Other investigators reaffirmed those two major functions of mentoring (Burke, 1984; Kram and Isabella, 1985; Noe, 1988b, Scandura, 1992). Scandura (1992) defined the vocational function of mentoring as career coaching and development; she defined the psychosocial support as social support. Scandura (1992) also identified role modeling as a third function of mentoring. For purposes of this study, role modeling is considered to be a strategy used in both the vocational and psychosocial functions. In later work, Higgins and Kram (2001) found that the protégé's orientation toward career development affected whether both functions are realized. They stated that unless protégés are interested in both career development and personal growth and in learning that extends beyond immediate concerns regarding career advancement, they are not likely to benefit from psychosocial support. Such individuals tend not to express themselves with others and to act in inauthentic and defensive manners. Scandura (1992) found that having a mentor correlated highly with high managerial ratings, salary attainment, and promotion for the protégé.

Phases of Mentoring

Kram (1985) cited and reaffirmed the earlier work of Levinson et al. (1978), Clawson (1979), Missiraian (1982), and Phillips (1979) in describing mentor relationships as evolutionary; that is, they evolve through a number of phases. Kram identified those phases as initiation, cultivation, separation, and re-definition. She delineated the initiation phase as a period of six months to a year when the relationship

begins and becomes important to both mentors and protégés. She defined cultivation as a period of two to five years when the maximum range of career and psychosocial functions are provided. Kram indicated that separation spans a period of six months to two years after a significant change in the structural role relationship and/or in the emotional experience of the relationship. She identified the final phase as redefinition, an indefinite period after the separation phase when the relationship either ends or becomes a more peer-like friendship.

As recently as 2006, Allen, Eby, and Lentz agreed that little research exists to show the effectiveness of mentoring; yet they stated that books and articles explaining how to mentor continue to proliferate. They cited a notable exception in a study by Ragins, Cotton, and Miller (2000), which does measure effectiveness as indicated by mentor and protégé satisfaction. Earlier studies (Douglas, 1997; Gibb & Magginson, 1993) focused on the design of formal mentoring programs. Gibb and Magginson suggested that the purpose of mentoring may be gaining employee commitment, rather than meeting the needs of the protégé. Zey (1985) maintained that one of the purposes of formal mentoring programs was to help corporations meet their affirmative action mandates. By the beginning of the 21st century, Eddy, Tannebaum, Alliger, D'Abate, and Givens (2001) noted that many major U.S. companies had formal mentoring programs in place to help them attract, retain, and develop high-performing employees.

A Look Toward the Future: Developmental Networks

An interesting recent phenomenon that Higgins and Kram (2001) observed was the concept of entrepreneurial developmental networks. They cited Burt's (1992)

definition of entrepreneurial as social networks that span multiple groups or sub-networks. Higgins and Kram (2001) stated that entrepreneurial networks are made up of developers who are highly motivated to act on behalf of their protégés and who provide access to a wide array of information. They indicated that entrepreneurial developmental networks have the capacity to impact four important protégé career outcomes: career change, personal learning, organizational commitment, and work satisfaction. Higgins and Kram provided one term for all the people who provide support to a mentee in a developmental network, and that term was "developer." They did not distinguish among the people in terms of the amount or type of support that they provide. They identified two dimensions of the developmental network structure as "diversity," the number of different social systems (e.g., community, employment, school) from which the mentees receive support, and "strength of ties," the frequency of communication and level of closeness experienced in the relationships. They predicted increased importance for entrepreneurial developmental networks because of twenty-first century changes in the current career environment related to the lack of job security, the rapid pace of change in information and digital technologies, the changing nature of organizational structures, and the increasing diversity in the workplace. Because of widespread adoption of social networks for communication, Higgins and Kram predicted that entrepreneurial developmental networks will naturally become increasingly important in the mentoring field.

In 2007, Higgins, Chandler, and Kram added a third dimension of "developmental initiation" to the body of theory about entrepreneurial developmental networks.

"Developmental initiation" refers to "a set of development-seeking behaviors undertaken by a focal individual that are intended to enhance his or her skills, knowledge, task performance, and/or personal learning" (p. 349). This brave new world of entrepreneurial developmental networks adds many possibilities for increasing the effectiveness of mentoring, particularly for those who are the digital natives in social networking.

Need for Mentoring for Minorities and Women

According to Eby, McManus, Simon, and Russell (2000), obtaining a mentor is an important career development experience for individuals. The authors further stated that research indicates that mentored individuals perform better on the job, advance more rapidly within the organizations (i.e., get promoted more quickly and earn higher salaries), report more job and career satisfaction, and express lower turnover intentions than their non-mentored counterparts. Eby, McManus, Simon, and Russell (2000, p. 17-18) noted in the conclusion section of their work that there are unique mentoring related issues facing individuals from diverse racial and ethnic groups, as well as women, and that those issues should be explored.

Although there has been some improvement in recent years, research by Allen, Jacobson, & Lomotey, (1995, p. 412) and Sadker, Sadker, and Klein (1991, p. 284) showed that women and members of underrepresented groups who were chosen for administrative positions were generally seen as "tokens" and received differential treatment compared to White males. Landau (1995) examined the relationship of race and gender to managers' rating of promotion potential. In her sample of 1,268

managerial and professional employees, women, Blacks, and Asians were rated lower in promotion potential than White men. Allen, Jacobson, & Lomotey (1995) found that African American administrators were more often placed in predominantly African American schools and/or assigned to programs identified with African American young people. This practice restricted opportunities for the individual to interact with potential sponsors from among higher-ranking, typically White, male administrators, thus impeding promotion.

Sadker, Sadker, and Klein (1991) reviewed research from the 1960s and 1970s that was focused on internal and external barriers to female and minority advancement in educational administration. The research attempted to determine why women—who are the majority of teachers—are the minority of administrators. The researchers found that women were less likely than men to receive encouragement and mentoring. Sadker, Sadker, and Klein (1991) found specific initiatives to provide mentors for women and minorities by the late 1980s. One of those initiatives was by the United States government (Leadership in Educational Administration Development Study Group on Women and Minorities, 1990, p.99), which recognized the need for supporting and recruiting more women and minorities into educational administration and published a resource manual on how to achieve that goal; it included establishing a personal support system for receiving feedback and assistance as one of the suggestions.

Marshall (1985) as cited in Brunner and Grogan (2007) defined and described the mentor-protégé relationship, while explaining its elusiveness for women:

The most powerful training and mobility structure in the educational

> administration career, the sponsor-protégé relationship, occurs when a powerful person notices, tests, trains, and promotes a protégé. The sponsor-protégé relationship is a close and personal one. Male sponsors are reluctant to invest their efforts in women because women are different and because close male/female relationships most often are seen as non-professional. (p. 42)

Wolfman (1997) as cited in Clayborne and Hamrick (2007), found the situation to be more severe for Black women administrators, stating "…Black women administrators are left on their own, without mentors, having to learn the institutional culture through observations, guile, and intelligence" (p.125).

Revere's (1987) study reaffirmed the importance of mentoring as it was one of the four strategies mentioned most often by the twenty-nine Black women superintendents as important to their success in achieving the position. Providing mentors early in the career of aspiring Black women superintendents was one of Revere's recommendations. In a review of literature related to Black women superintendents, Tillman and Cochran (2000) found that mentoring has been consistently identified as a crucial factor for success in higher level administrative positions. They cited five researchers (Brunner, 2000; Cline & Nocochea, 1997; Hill & Ragland, 1995; M. Hudson, 1994) who found that the most natural mentoring relationships tend to occur between people with similar demographic characteristics, thus leaving Black women at a disadvantage in establishing informal mentoring relationships with power brokers. In a more recent work, Lankau and Scandura (2007) reported the same findings. In this study, the authors report that Black women are often hired because they supposedly bring different perspectives. The

conundrum is that if they are to succeed, they must seek out the opportunity to have higher-ranking, typically White, male administrators as mentors.

The need to be mentored by White male administrators creates conflicts for Black women superintendents as they aspire to transform education to meet the needs of all children. Cline and Necochea (1997) noted the paradox of school reform and mentoring: "The individuals who are being asked to lead the transformation are being mentored to perpetuate the status quo" (p.53). Enomoto, Gardiner, and Grogan (2000) agreed; in their summary of 18 case studies of mentor-protégé relationships, they noted that women of color who serve as mentors must frequently "disguise themselves as dominant White men in leadership roles" (p.568). Such conflict causes Black women to seek support from outside the professional setting. For example, Clayborne and Hamrick (2007) conducted a qualitative study of African American women holding mid-level university administrative positions. They found that the women's key support structures were family members, close friends, and spiritual resources, such as praying, reading the Bible, and attending religious services. Not one of the respondents to their study named co-workers as part of the key support structures. Wrushen and Sherman (2008) reported similar findings in a review of research on African American women, as did Alston (1999), Jackson (1999), and Bloom and Erlandson (2003). These authors all concurred that African American women struggle for visibility and report that their leadership was influenced primarily by experiences with family, cultural, and spiritual backgrounds. Jackson (1999) found that such experiences prepared African American women for leadership early in their careers. In a study of African American women in educational

administration, Allen, Jacobson, and Lomotey (1995) established a subtle distinction between mentors and sponsors. They defined "mentor" as someone who provides counsel and moral support for an aspiring administrator and "sponsor" as someone who provides opportunity and employment. It is their position that family and other mentors can provide the moral support needed for aspiring school administrators, but only someone in the field of education can provide opportunity and employment. For the subjects in their study, that sponsorship was not occurring. Allen, Jacobson, and Lomotey (1995) deduced that the lack of sponsorship was the reason that African American women administrators found it difficult to advance beyond the entry-level administrative positions.

In 2003-04, persons of color, male and female combined, represented only 24% of principals at all levels in the United States, with 5% being at the secondary level (Strizek et al. 2006). The intersection of race and gender for female leaders create what was first coined by Andrews (1993) as the "double whammy." Several feminists of color have attempted to explain this double whammy which can make daily psychological well-being a struggle (Collins, 2000; hooks, 2000), not to mention the extra demands it places on pursuing a demanding administrative career in education. In a study of Black women superintendents in the United States in 1984-85, Revere (1987) noted the paucity of Black women superintendents in the United States, despite the fact that many Black females were teachers. They found only twenty-nine Black women superintendents employed in public school districts, representing just 0.18 percent of 16,000+ districts. In 1999, Brunner found that Black women constituted about 1.5 percent of all

superintendents. In 2000, Glass, Bjork, and Brunner (as cited in Brunner and Grogan, 2007) found that 5% of the superintendents were persons of color, and of those 5%, only 1% were women. This number represented, however, a steady growth from the three Black women superintendents who were employed in the 1970s.

Brunner and Grogan (2007) analyzed the data from the 2003 American Association of School Administrators (AASA) National Survey of U. S. Women Superintendents and Central Office Administrators to develop a profile of women superintendents in the public school systems of the United States. In the sample, 65% of the women were Black, 17% were Hispanic, 13% were Native American, 2% were Asian, and 1% were Pacific Islander, and they considered these women together as women of color. They found that women of color were twice as likely as White women to have had to wait four or more years to secure their first superintendency. They also found that nearly four times as many women of color serve as superintendents in urban districts as White women (27% compared to 7%), and that 48% of White women superintendents serve in suburban or suburban-rural districts, as compared to only 37% of women of color. When all central office administrators are considered, the percentages are similar: Nearly four times as many women of color central office administrators served in urban districts (40%) as White women administrators (11%). On the other hand, more women of color central office administrators (nearly half) served in districts of more than 10,000 students than White women central office administrators (a third). Finally, 42% of women of color, compared to only 33% of White women, served as central office administrators in districts with declining enrollment.

Since urban districts are widely considered to be more challenging, with far greater concerns regarding student achievement, safety, truancy, and teacher turnover (Haberman, 1995, 1999; Jacob, 2007), women superintendents of color obviously have proven their skills at meeting leadership challenges. All school districts will benefit from leaders with those skills, yet the statistics above clearly show that women of color are far less likely to serve in suburban and suburban/rural schools. Mentoring might be one avenue that would enable suburban and suburban/rural schools to benefit from the proven leadership skills of women of color.

In their review of literature, Brunner and Grogan (2007) found that attributes often shared by women superintendents and superintendents of color, such as a predisposition for collaboration and a focus on instruction, are qualities needed in a modern superintendent. Therefore, methods to advance women and women of color into educational administration will benefit the field.

Cross-cultural and Cross-gender Mentoring

Because White male administrators still greatly outnumber female and especially minority female administrators, cross-cultural and cross-gender mentoring must occur if every female and minority female aspiring administrator is to receive mentoring from someone with experience in the field. Such cross-cultural mentoring is addressed in mentoring literature. For example, Schramm (2000) and Shollen, et al (2008) agreed that mentoring across culturally diverse backgrounds requires the transfer of academic skills, attitudes, and behaviors, as well as the development of high levels of interaction, trust, and communication. They stated that a mentor's ability to understand the protégé's

culture and norms can facilitate this process. Johnson (2002) suggested that mentors who work with protégés of another culture should have genuine concern for the experiences and welfare of their protégés, should invest time in learning about the unique cultural heritage of their protégés, and should appreciate each protégé's uniqueness within his or her culture. Crutcher (2007) posited the following:

> Faculty motivated to mentor people whose backgrounds or identities differ from their own must be adept at navigating cultural boundaries: personal, gender, racial, ethnic, and geographic. Because of the complexity of cross-cultural mentoring, mentors also need certain attributes or abilities, including selflessness, active listening skills, honesty, a nonjudgmental attitude, persistence, patience, and an appreciation for diversity. (p. 1)

Johnson (1998) stated that African American women can be particularly good mentors because they bring to their jobs a unique and diverse perspective as both women and minorities. In her book, *Mentorship: A Pathway* to *Career Success* (Boags, 2008), stated that mentoring across lines of differences is not as big a hurdle as many people think it is. Boags said that even mentoring pairs formed with persons from races and cultures with a long history of strife can be successful, and that mentoring across race, gender, culture, and global locations can be challenging but brings with it an opportunity to expand our understanding of differences. A good example was Marian Wright Edelman, the well-known female African American founder and president of the Children's Defense Fund. Edelman (2000) identified two White men, Charles Merrill, son of the founder of the Merrill Lynch brokerage house, and Howard Zinn, the

renowned teacher and historian, as two of her greatest mentors. In her qualitative study, Lindsay (1994) also found that female African American respondents reported positive experiences with cross-cultural and cross-gender mentors.

Blake-Beard (2001) found both anecdotal accounts and empirical research that showed mentoring to be a powerful tool for advancing women into executive positions. Blake-Beard found that women and men may have comparable access to mentoring, but that women are more likely to be in a cross-gender relationship because men still are in the top positions in organizations. They also found that women have to work harder to establish relationships and must cross gender, hierarchical, and, for women of color, racial lines.

Enomoto, Gardiner, and Grogan (2000) identified four considerations that contribute to mentoring success. First, the mentor and protégé must consider the power relationship on which the mentoring is based; the protégé may get more opportunities and therefore more work; the mentor must take care to give support and recognition. Second, the support and care giving of the mentor must not devolve into patronizing actions that create dependency rather than independence and self-reliance. Third, the mentee will be under constant scrutiny as a member of a minority, and the mentor must communicate to others in the workplace that the protégé has been chosen based on merit and not because of favoritism. Fourth, the mentor of a person of color must understand the historical, social, and political context of the mentee and advocate for equal access and opportunities. As Murrell, Crosby, and Ely (1999) stated, leaders in educational organizations need specialized training in both cross-cultural and cross-gender mentoring

before attempting to mentor someone of another culture or gender. In the Enomoto, Gardiner, and Grogan study (2000), protégés of color expressed the following six necessities for those moving into educational administration; therefore, mentors need to help them acquire those necessities. The first necessity was an understanding of the highly political nature of school systems while enabling persons of color to develop the necessary skills to walk the fine line as both minorities and women—Andrews (1993) "double whammy." Second was a need to gain access into networks inside and outside the school system. Third, protégés of color desired and benefitted from mentors who were like themselves. Fourth, they needed the advice of mentors who were different from themselves because so few minority women were in positions of power. Therefore, the fifth necessity was that protégés needed more than one mentor, preferably at least one woman and one person of color. The sixth necessity was the need for alternative support systems beyond the formal and informal mentoring provided by educational systems.

Another consideration for mentoring was one uncovered by a review of the literature on teacher mentoring. Wang, Odell, and Schwille (2008) found that novice teachers were concerned with classroom management, curriculum resources, and their relationships with students. Wang, Odell, and Schwille postulated that these concerns of the novice teachers pushed the mentoring to those topics rather than to helping the novice with the quality of teaching and student learning. Focusing on novice concerns that diminish the attention to student learning is a similar concern for administrative mentors who must keep expectations high and focused on student learning for all mentees.

Brunner and Grogan (2007) analyzed the results of national descriptive studies of

women superintendents and women deputy/associate/assistant superintendents conducted by the American Association of School Administrators (AASA) in 2000 and 2003. Their findings concur with those of Murrell, Crosby, and Ely (1999). Brunner and Grogan (2007) found that women superintendents and aspiring superintendents had a much greater percentage of both men and women mentors. Women deputy/associate/assistant superintendents showed that they believed in the power of mentoring by serving as mentors; 84% of them had served as a mentor for someone else aspiring to be an educational administrator.

Effectiveness of Mentoring

In a study conducted by *The Harvard Business Review,* Roche (1979), found that 75% of the top executives in the United States had been mentored. When compared with their peers, those 75% earned 28% more, were more satisfied with their work, and were more likely to have achieved a college degree and to mentor others. Noe (1988b) found that successful formal mentoring programs must have top management support, careful selection of mentors and protégés, an extensive orientation program which would develop realistic expectations of the mentoring program, clearly stated responsibilities for both mentor and protégé, and established minimum duration and frequency of contact between mentor and protégé. Ortberg (2003) cautioned that mentors must not attempt to fix or control their protégés or to pretend that they are what they are not. Lindsay (1994) stated that professional development and education programs for gender and racial minorities, such as mentoring, will help to remedy the exclusionary practices that exist in educational administration and will help female racial minorities to succeed in educational

administration. As Noe (1988b) suggested, Title VII of the Civil Rights Act of 1964 provides a legal basis for the mentoring for women and minorities in cases such as *Watkins v. Scott Paper Company* (1976) and *Carter v. Shop-Rite Foods* (1979). The *Watkins v. Scott Paper Company* decision states that courts (and therefore employers) "must strive, however, to cut beneath the facade of good faith, counteract the 'built-in headwinds' of racial bias, and prevent discriminatory consequences" (Section 186). Many employers have used mentoring as a method of counteracting racial and gender bias and providing advancement opportunities for women and minorities. However, Enomoto, Gardiner, and Grogan (2000) agreed that if mentoring is to be considered useful for women and minorities, the relationship must help them in negotiating through predominantly White male administrations. Enomoto, Gardiner, and Grogan also found that it was important to mentees that their mentors believe in them, care about their success, and have a nurturing relationship with them.

Benefits to the Mentor

Benefits to the mentors have also been established in the mentoring literature. Levinson et al (1978) found that mentoring revitalizes the careers of the mentors. In a structured analysis of more than 300 research-based articles on formal mentoring programs in three discipline areas (education, business, and medicine), Ehrich, Hansford, and Tennent (2004) found that benefits to the mentors fell into four categories (a) collegiality, collaboration, networking, sharing ideas and knowledge; (b) reflection; (c) professional development; and (d) personal satisfaction, reward, and growth. Brunner and Grogan (2007) found that the act of mentoring brings considerable self-fulfillment

for superintendents and central office administrators.

Research Considerations

In their review of over 300 research-based articles, Ehrich, Hansford, and Tennent (2004) found that few mentoring programs conducted evaluations, and that most were evaluated by vague and imprecise techniques, such as testimonials and opinions. In 2007, Allen, Eby, O'Brien, and Lentz reviewed the methodology and content of 200 published mentoring articles. They were concerned with the fact that little is known about cross-cultural mentoring relationships. This study will add to the body of knowledge about cross-race and cross-gender mentoring with the use of a survey that guides the respondent to think about important aspects of the mentoring experience and judge its overall effectiveness.

Chapter 3

Procedure

In this chapter, the methodology used to gather and analyze data will be discussed. This study used data gathered from a cross-sectional survey to address the research questions.

Description of Population

The administrators in this study were employed by a large Midwest suburban school district. According to the District Report Card published annually by the Missouri Department of Elementary and Secondary Education (DESE), the District enrolled approximately 19,000 students. Residents of the District were primarily middle income to low income, although some of the residential areas consisted of highly paid professionals. Approximately 68% of the students were African American; 29% European American; 1% Asian American; and 1.5% Hispanic American. The district-wide free and reduced lunch percentage included 53% of the total student population. (Missouri Department of Elementary and Secondary Education, 2009)

Because of the high percentage of African American students in the schools in the study, the District had been actively recruiting and developing African American teachers and administrators under the leadership of the previous superintendent. The District's formal mentoring program provided each new administrator with an assigned mentor; therefore, the program presented an excellent opportunity to examine the effect of mentoring on the mentees. For purposes of this study, the term "educational administrator" referred to an educational leader whose responsibilities include

supervising programs or personnel in the district (see Chapter 1, page 15). Using these criteria, the District employed 130 administrators, and they were all possible respondents in this study.

Job Categories

The 130 administrators employed by the District fit into 36 different job categories. Ninety-two of the administrators were building level administrators; thirty-eight were district-level administrators. The superintendent headed a leadership team composed of an associate superintendent of curriculum and instruction and eight assistant superintendents in the following areas: communication services, data and technology, finance and facilities, human resources, school accountability (3), and student services. The other district-level administrators included directors of the following areas: accounting and finance, enrollment, federal programs and early childhood education, gifted and English language learners, human resources, management information systems, purchasing and supplier diversity, safe schools/healthy lifestyles project, safety and security, school information systems. A director and assistant director were employed at the district level in the following areas: child nutrition services, custodial services, maintenance, and transportation. The final district-level administrators were 6 curriculum coordinators and the lead nurse. At the school level, the District employed 3 high school principals, 3 high school associate principals, 13 high school assistant principals, 3 high school activity directors, 6 middle school principals, 17 middle school assistant principals, 20 elementary principals, 3 early childhood site coordinators, and 27 instructional coaches.

Eighteen of the administrators were non-certified. The non-certified administrators included the assistant superintendents of communication services, data and technology, and finance and facilities; the directors of accounting and finance, enrollment, human resources, purchasing and supplier diversity, safety and security, and school information systems; the directors and assistant directors of child nutrition services, custodial services, maintenance, and transportation; and the lead nurse. Both certified and non-certified administrators were included in the survey sample because the former superintendent was successful in creating a culture where all employees, certified and non-certified, assumed responsibility for improving student achievement.

The job categories and a summary of each position are included in Appendix A.

Data-Gathering Techniques

An extensive review of the literature on mentoring was conducted, and several surveys about the quality of the mentoring experience appeared in the literature. For example, Noe (1988a) developed a questionnaire to assess the various functions provided by mentors. Noe's questionnaire was of particular interest to this researcher because of the topics it addressed; however, some of the items in his questionnaire did not fit this study. Therefore, a cross-sectional, self-reporting attitudinal questionnaire based on Noe's questionnaire was designed to address the hypotheses of this paper (Appendix B). A questionnaire of 48 statements was developed; 47 of these statements were forced choice items, and one requested a brief written response. The items on this questionnaire were designed to elicit the mentee's responses about whether their mentoring experiences aligned with best practices.

The questionnaire began with a section of closed-ended statements to gather demographic information. The second section was designed to gather information about the perceptions of school administrators on the effectiveness of their mentoring relationships in both career and psychosocial measures using a Likert scale with five choices ranging from "Strongly disagree" to "Strongly agree" to record the degree of agreement each respondent had on the given question. The final section consisted of one open-ended item to encourage respondents to elaborate on their experiences. The first 32 statements in this section were constructed to guide the respondents in reflecting on their mentoring experiences. The intent was for the respondents to then use these statements to inform their answer to Item 47: "Overall, my mentoring experience was effective."

Validity and Reliability of the Instrument

The literature review on mentoring identified research-based best practices. Creswell (2005) provided definitions of "validity" and "reliability" that were consistent with the *Standards for Educational and Psychological Testing* of the American Educational Research Association, the American Psychological Association, and the National Council of Measurement in Education (1999). According to Creswell, "Reliability means that scores from an instrument are stable and consistent" (p. 162). That is, scores should be nearly the same if the instrument is administered multiple times. Also, an individual who completes the survey will answer closely related questions in the same way. Creswell stated that "validity means that the individual's scores from an instrument make sense, are meaningful, and enable you, as the researcher, to draw good conclusions from the sample you are studying to the population" (p. 162). Creswell

recommended considering content validity by asking experts if the questions are representative of the area of interest. He recommended establishing construct validity to determine whether conclusions may be logically and safely based on the data from this study. The cross-sectional self-reporting attitudinal questionnaire in this study was developed in alignment with those practices.

Noe's work on assigned mentoring relationships (1988a) provided a foundation for the current study. Noe (1988a) developed a 32-item scale to assess the functions provided by a mentor. The validity of these items was established by previous qualitative analyses and descriptive studies of mentoring relationships (e.g. Burke, 1984; Kram, 1983, 1985; Kram & Isabella, 1985; Roche, 1979; Zey, 1985). Noe removed three of the 32 items because more than 50% of the respondents marked the "Don't Know" category as their response. The remaining 29 items became his Mentoring Functions Scale (See Appendix C). In Noe's study, the scale was administered at nine different sites across the United States to 139 educators and 43 mentors.

Items in the Mentoring Functions Scale primarily loaded onto two factors that corroborate Kram's (1983, 1985) identification of two major functions of mentoring. Noe (1988a) analyzed the factors into psychosocial and career functions:

> Factor 1 appears to represent psychosocial mentoring functions because the items defining the factor assess the extent to which the mentor provided coaching, counseling, acceptance and confirmation, and served as a role model.
>
> Examination of the item loadings for Factor 2 suggests that this factor represents mentoring functions related to the protégé's career (i.e., protection, exposure and

> visibility, sponsorship, and challenging assignments). All mentor functions are represented by the two factors, with the exception of items assessing friendship, which did not clearly load on either factor. (Noe, 1988a, pp. 467, 469)

He analyzed the responses to the survey for validity and internal consistency reliability and found that his scale accurately identified the psychosocial and career functions of mentoring with high internal consistency scores. Noe (1988a) suggested that other researchers use the scales because of the high reliability:

> The high internal consistency reliability estimates and homogeneity of item content suggest that the mentoring function scales may be a useful criterion measure for researchers and training practitioners concerned with understanding the effectiveness of assigned mentoring relationships. Also, the large number of item loadings above .60 suggest that the factor solution on which the scales are based is likely to be accurate. (Guadagnoli & Veliver, 1988, p. 274; Noe, 1988a, p. 473)

Items # 15, 19, 20, 21, 23-27, 30-36, 38-44 from this researcher's questionnaire measure the same functions as Items # 2-14, 15-22, and 24 on the Noe questionnaire. Therefore, their reliability and validity have been confirmed by Noe (1988a) as described above.

In addition, content validity of the instrument used in this study was verified by two content experts, the interim superintendent and the former assistant superintendent for curriculum and professional development of the research district, a large Midwestern suburban school district. Both hold doctorates in Educational Leadership and are very mature, immensely experienced, and well-respected in their field. Their expertise is often

sought by other educators, and their judgment is widely considered to be reliable and valid.

Content validity is a measure of the degree to which the content of the test covers all aspects of the content domain, and it is typically evaluated by content experts. These two assistant superintendents examined the survey for content validity and made suggestions for improving its content validity. They suggested adding questions related to improving student achievement, effectiveness, and job satisfaction. Those suggestions were incorporated into the survey. Their letters attesting that the instrument looked like and had all the components of a mentoring survey are included in Appendix D.

Face validity is a form of validity in which researchers determine whether a test seems to measure what it was intended to measure. Face validity was determined by a small sampling of administrators in the Fall 2009 *The Research Process II: Developing & Refining Research Proposals* class at the University of Missouri – St. Louis. They field-tested the survey to identify valid questions and to make suggestions about the survey. The administrators in the class made suggestions to include additional race categories, and the instructor suggested adding the open-ended question at the end of the survey. Those suggestions were also incorporated into the survey. Face validity was further verified through a convenience sampling conducted face-to-face and via telephone of five respondents. "Convenience sampling is a quantitative sampling procedure in which the researcher selects participants because they are willing and available to be studied" (Creswell, p. 590). The five respondents were chosen at random from two groups: Certified and non-certified administrators.

Reliability of the instrument was verified by analyzing the data using Cronbach's alpha. The interim superintendent also suggested use of the electronic SurveyMonkey™ (1999-2011) to increase the survey response rate and therefore improve the reliability of the survey responses.

The large Midwestern suburban school district was selected as the site for the survey because it had a relatively large percentage of African American school administrators in a suburban setting. Four of nine members of the superintendent's leadership team were African American, two of them female and two of them male. One of three high school principals was an African American male. Six of thirteen high school assistant principals were African American; five of those African American high school assistant principals were female. Seven of seventeen middle school assistant principals were African American; five of those African American middle school assistant principals were female. Three of six middle school principals were African American, one of them male, and two of them female. Seven of twenty elementary principals were female African Americans. One of three early childhood site coordinators was a female African American. One of three certified program directors was a female African American. Ten of twenty-seven instructional coaches were female African Americans. Four of ten non-certified directors were African American; three of the four were female. The lead nurse was a female African American. All these administrators share a common district culture, thereby controlling for intervening factors that might occur if the administrators were in different districts.

Data Collection

The researcher received permission to conduct the research from the interim superintendent of the school district in which the administrators were to be surveyed. The survey was submitted to the Institutional Review Board of the University of Missouri – St. Louis for approval and received an exempt status on the study. The researcher and an assistant delivered consent forms (See Appendix E) to certified and non-certified administrators at their schools or work sites or at an administrative meeting. The data were gathered electronically on SurveyMonkey™ (1999-2011) as the interim superintendent suggested. Once an administrator completed and returned the consent form to the researcher, the researcher contacted the district webmaster to send the link to the survey (See Appendix E) on SurveyMonkey™ (1999-2011) to the administrator's school district email address. After the participant completed and submitted the survey, the participant was prompted to email the researcher that he/she had completed the survey. All completed surveys were anonymous. One hundred nineteen administrators received consent forms; 112 administrators returned the consent forms. Of those 112 administrators, 83 administrators completed the questionnaire for a response rate of 70%.

Data Analysis

The school district provided the electronic results for each question on the survey compiled by SurveyMonkey™ (1999-2011), including the open-ended response on Item 48 of the survey. As the data were downloaded in Microsoft Excel format, all data questions were subsequently recoded into a numerical database following the coding key presented in Appendix F. This data set was then loaded into SPSS for data analysis and

subsequent hypothesis testing.

The answers to Items 1-14 were summarized by category to provide descriptive statistics about the population that completed the questionnaire. Items 1 through 4 were the grouping variables to divide the data into subjects who had same-race and same-gender mentors and subjects who did not have same-race and same-gender mentors.

The responses to Items 15-47 were analyzed using a t test using both race and gender as grouping variables. The t test was used to find out whether males and females responded differently to items, and separately, whether Caucasians and African Americans responded differently to the same items. The t test was included as part of exploratory data analysis in order to show the individual responses to data.

The responses to Item Number 47: "Overall, my mentoring experience was effective" was the key determinant for accepting or rejecting the null hypotheses.

Item 47 was analyzed using ANCOVA for Hypotheses One and Two. ANCOVA is an analysis of covariance. According to Green and Salkind (2008, p. 182), this statistical analysis evaluates differences between two or more groups on a dependent variable, statistically controlling for differences on one or more covariates. ANCOVA was used to look at the effects on mentee satisfaction of the variables of race and gender separately. In Hypothesis One, the effects of mentor gender on the mentee's perception of the effectiveness of the mentoring experience were examined while statistically controlling for the effects of race. In Hypothesis Two, the effects of mentor race on the mentee's perception of the effectiveness of the mentoring experience were examined

while statistically controlling for the effects of gender. ANCOVA enabled the researcher to be precise in evaluating the effects of the different variables.

MANOVA was used to analyze Items 15 (respect), 30 (trust) and 47 for Hypothesis Three. According to Green and Salkind (2008, p. 182), MANOVA is a multivariate analysis of variance, which evaluates the relationship between a single between-subjects factor and two or more dependent variable. In this case, using a MANOVA enabled the researcher to see whether there was any significant difference between female African American school administrators and other school administrators on three variables, making it more likely for a difference to appear.

In addition, the responses to Items 1-47 were subjected to descriptive analysis and graphed on histograms (See Appendix G) to give a visual display of the frequency of each of the responses.

The responses to Item Number 48 were analyzed to determine themes and suggestions for further research.

Chapter 4

Research Findings

Research Questions

As indicated in Chapter 1, the purpose of this study is to determine the perceived effectiveness of the professional mentoring that female African American school administrators and other school administrators have received in their school districts.

The following three research questions were examined to guide the study:

1. Does the composition of gender pairing (same or opposite gender) make any difference in whether school administrators with same-race mentors perceive their mentoring experiences to be as effective as that of school administrators with cross-race mentors?
2. Does the composition of racial pairing (same or different race) make any difference in whether school administrators with same-gender mentors perceive their mentoring experiences to be as effective as that of school administrators with cross-gender mentors?
3. Do female African American school administrators perceive their professional mentoring experiences to be as effective as other school administrators do; do they perceive that their mentors treat them with as much respect as the mentors of other school administrators do; and do they trust their mentors as much as other school administrators trust their mentors?

Statistical Procedures

The results of the analyses described in Chapter 3 are summarized in this chapter. Each of the hypotheses is listed, followed by related figures and a statement of the results for hypotheses tests. An error level of 5% (Alpha=.05) is used for all statistical tests as computed by SPSS.

These research questions were investigated using a 48-item questionnaire developed by the researcher. The first 47 items were forced choice items. Item 48 was an optional statement requiring a short written response. The responses to Item Number 48 were analyzed to determine themes and suggestions for further research.

The population for this study consisted of all the certified and non-certified administrators in a large Midwestern suburban school district. Eleven of the 130 administrators were unavailable due to illness or travel, so consent forms (See Appendix D) were distributed to 119 certified and non-certified administrators in the school district. One hundred twelve administrators returned the consent forms; they then received the link to the questionnaire (See Appendix B) in electronic form delivered to their school district email addresses. Eighty-three of the administrators completed the questionnaires at SurveyMonkey™ (1999-2011) for a 70% return rate.

The totals of the gender-racial groups completing the survey were as follows: African American females = 28; African American males = 6; Caucasian females = 32; Caucasian males = 14; respondents not identifying race and/or gender = 3.

Three of the 83 questionnaires were unusable because of their responses, yielding a sample of 80 for exploratory data analysis. One respondent completed the following

message in Item 48: "I am currently employed in the district's transportation department and unaware that we are supposed to have a mentoring program. At this time no such program exists in transportation; therefore, I am unable to respond to this survey." The respondent answered only Items 1 (my race), 3 (my gender), 5 (my age), and 7 (certification). This respondent was deleted from the database as no questions were answered that could be utilized in the required analyses.

A second respondent completed the following message in Item 9: "Did not have a mentor assigned to me." This respondent answered only Items 1 (my race), 3 (my gender), 5 (my age), and 7 (certification). This respondent was deleted from the database as no questions were answered that could be utilized in the required analyses.

A third respondent completed the following message in Item 9: "I didn't have a mentor," in addition to the following response to Item 48: "When I accepted the position as an administrator, I was not assigned a mentor although many of my co-workers assisted with district expectations and interpretation of policies and procedures." This respondent answered Items 15 through 47 with all neutral "neither agree nor disagree" answers but did appear to identify a "mentor" by answering Items 6 (mentor age) and 8 (type of program – "Hybrid"). This respondent was deleted from the database as the responses were neutral, and the other information indicated that the responses might be considered inappropriate.

Removing these three respondents from the total of 83 who answered the survey left a total of 80 respondents whose questionnaires were analyzed for the exploratory data analysis, which yielded an effective return rate of 67% for exploratory data analysis.

This exploratory data analysis determined that the responses displayed reliability and internal consistency reliability.

Three more respondents were removed before the statistical data analysis for the three hypotheses because they did not identify race and/or gender, yielding a final sample of 77 for the statistical data analysis for Hypotheses 1 and 2. For statistical data analysis, 77 surveys were analyzed, yielding an effective return rate of 65%.

The analysis of data for Hypotheses 3 compared the responses of the female African American administrator mentees to the responses of all other administrator mentees. Four of the African American females answered the survey with incomplete responses, so their surveys could not be used for this study, yielding a population of 24 female African Americans for Hypothesis 3. (See explanation below Table I.)

Table I:
Respondents' Demographic Characteristics

	Male	Female	Total
African American	6	28***	34
Caucasian	14	32	46
Sub-total	20	60	80
Race not identified			2**
Gender not identified			1**
Total respondents			83
Unusable surveys due to responses			(3)*
Total N for Exploratory Data Analysis			80
Race not identified, not used in statistical analysis			(2)**
Gender not identified, not used in statistical analysis			(1)**
TOTAL N for Statistical Analysis			77

*Three returns were unusable for the reasons explained in the paragraphs above.
**Usable for exploratory data analysis; unusable for statistical data analysis
***Four of the 28 African American female respondents provided incomplete answers, yielding a population of 24 African American female administrators for comparison purposes in Hypothesis 3.

Exploratory Data Analysis

As Creswell suggested, Cronbach's Coefficient Alpha was calculated to confirm internal consistency and to be used as a measure of reliability. Creswell (2005) defines Coefficient Alpha as "a measure of the internal consistency of items on an instrument when the items are scored as continuous variables (e.g., strongly agree to strongly disagree)" (p. 589). The Cronbach's Coefficient Alpha of .974 (See Appendix G), indicates that items 15-47 on the questionnaire (the items about mentoring) have high internal consistency and reliability. The high value also indicates that the items derive from the same concept in the literature, thus supporting the earlier statement in Chapter 3 that the scale has construct validity.

Table II
Case Processing Summary for Cronbach's Coefficient Alpha for Questionnaire Items 15-47

		N	%
Cases	Valid	71	88.8
	Excluded*	9	11.3
	Total	80	100.0

*Listwise deletion based on all variables in the procedure

Table III
Reliability Statistics for Cronbach's Coefficient Alpha for Questionnaire Items 15-47

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.974	.976	33

As indicated earlier, SPSS was used for explanation and analysis. The purpose is

to develop complete understanding of the responses to all items and to confirm that those variables were appropriately distributed. See Appendix B for the questionnaire and Appendix G for the descriptive statistics and the histograms that give a visual picture of the frequency of the responses.

The following definitions by Cohen and Swerdlik (2002, pp. 650, 656) tell the meaning of terms used to explain the data analysis.

Central tendency: "A statistic indicating the average or middle scores in a distribution (also called measure of central tendency)" (p. 650).

Histogram: "A graph with vertical lines drawn at the true limits of each test score (or class interval), forming a series of contiguous rectangles" (p. 656).

Mean: "A measure of central tendency derived by calculating an average of all scores in a distribution" (p. 650).

Median: "A measure of central tendency derived by identifying the middle-most score in a distribution" (p. 650).

Mode: "A measure of central tendency derived by identifying the most frequently occurring score in a distribution" (p. 650).

The following definition by Creswell (2005) explains normal distribution.

Normal Distribution: "A distribution of scores by participants that can be represented by a graph that approximates a bell-shaped curve" (Creswell, p. 595).

Demographic Items

Item 1 requested identification of the respondent's race, using five named race categories as well as a final category labeled "Other." Thirty-one respondents identified

themselves as African American and 47 as Caucasian. Two respondents did not answer the item.

Item 2 requested identification of the race of the respondent's primary mentor, using five named race categories as well as a final category labeled "Other." Twenty-seven respondents identified their primary mentors as African American and 52 as Caucasian.

Item 3 requested identification of the respondent's gender, using the categories of "female" and "male." Fifty-nine respondents identified themselves as females and 20 identified themselves as males. One respondent did not answer the item.

Item 4 requested identification of the gender of the respondent's primary mentor, using the categories of "female" and "male." Fifty-six respondents identified their primary mentors as female, and 22 identified their primary mentors as male.

Items 1-4 were used to create the groupings for the three hypothesis tests.

Item 5, age of the respondent, is a ratio level variable, coded in age ranges, reporting the chronological age of the respondent. All 80 respondents answered the item, resulting in a mean of 2.45 with a standard deviation of .94. Translated from the categorical responses, this indicated that the mentees had an average age between 36 and 45. A review of the central tendencies and the histogram show that the variable is approximately normal in distribution.

Item 6, age of the respondent's mentor, is a ratio level variable, coded in age ranges, reporting the chronological age of the respondent's mentor. All 80 respondents answered the item, resulting in a mean of 3.35 with a standard deviation of 1.092.

Translated from the categorical responses, this indicated that the mentors had an average age between 46 and 55, older than the mentees as might be expected for a mentoring program. A review of the central tendencies and the histogram show that the variable is approximately normal in distribution.

Item 7 requested identification of the respondent's certification status, using the categories of "non-certified" and "certified." Nine of the respondents identified themselves as non-certified, and 71 identified themselves as certified. All 80 respondents answered this item, which was used to involve the non-certified participants in the research and confirm that they were a valued part of the project. Sometimes non-certified staff assume that they are not included in surveys related to school administrators. This item was included to confirm to the non-certified administrators that they were indeed included in the survey. The researcher delivered the consent forms to some of the non-certified participants, and they indicated that they were grateful to be included and to have their opinions count. In retrospect, it seemed to be a good decision to include this item to assure non-certified staff that they were intentionally receiving the survey. The histogram (See Appendix G) for this item reflects the non-normal distribution of the respondent's certification status, due to state law requiring certification of most school district personnel.

Item 8 requested identification of the type of mentoring relationship, using the categories of "informal relationship," "formal relationship," and "hybrid relationship." Twenty-six respondents indicated that they were involved in an informal mentoring relationship; 33 respondents indicated that they had a formal mentoring relationship; and

21 respondents responded that theirs was a hybrid mentoring relationship. All 80 respondents answered the item. While the literature makes the distinction between the types of mentoring relationships, for purposes of this research, the type of relationship was not considered. Like Item 7, this item was intended to include and involve all respondents, regardless of the type of relationship. The researcher's concern was that mentees who considered their primary mentor to be either informal or hybrid might not respond about that mentor if the survey instrument was unclear that those mentoring relationships were included.

Item 9, length of mentoring relationship in months, is a ratio level variable, using the categories "# of months," "# of years," and "other." For data analysis, responses were converted to multiples of 12 months. Seventy-eight respondents answered the item, resulting in a mean of 33.87 months with a standard deviation of 34.933. A review of the central tendencies and the histogram show that the variable is skewed toward a relationship lasting between two and three years.

Item 10 requested that the respondent identify the frequency of mentoring contact, using the categories "daily," "several times a week," "weekly," "several times a month," "monthly," and "infrequently." Ten respondents indicated that they were in contact with their mentors daily; 21 were in contact with their mentors several times a week; 7 were in contact with their mentors weekly; 21 were in contact with their mentors several times a month; 9 were in contact with their mentors monthly; and 12 were in contact with their mentors infrequently. All 80 respondents answered the item.

Item 11 requested that the respondent identify the most frequent method of

communication with the mentor, using the categories “face-to-face,” “telephone,” “texting,” and “email.” Forty-one respondents indicated that the most frequent method of communication was face-to-face; 25 respondents indicated that the most frequent method of communication was telephone; 13 respondents indicated that the most frequent method of communication was email. One respondent did not answer the item; 79 respondents did answer the item.

Item 12 requested that the respondent indicate whether the relationship was continuing, using the categories “Yes” and “No.” Forty-five respondents indicated that the relationship was continuing; 35 indicated that the relationship was not continuing. All 80 respondents answered the item.

Item 13, length of time since the mentoring relationship ended (in months), is a ratio level variable, using the categories “1-6 months,” “7-12 months,” “1-2 years,” “2-5 years,” and “5+ years.” In Item 12, only 35 of 80 respondents indicated that the relationship had ended; however, in Item 13, forty-seven of 80 respondents answered the item indicating the number of months or years since the relationship had ended. The discrepancy between the number of respondents (35) who indicated that the mentoring relationship had ended in Item 12 and the number of respondents (47) in Item 13 who indicated a length of time since the relationship had ended is unexplained. A review of the central tendencies and the histogram show that the distribution is bimodal with 13 respondents indicating that the relationship ended 1-2 years ago and 20 indicating that the relationship ended 5+ years previously.

Item 14, frequency of continuing contact, is a ratio level variable, using the

categories “daily,” “several times a week,” “weekly,” “several times a month,” “monthly,” and “infrequently.” Sixty-five respondents answered the item, 15 did not answer the item. A review of the central tendencies and the histogram show that the distribution is skewed toward category 6, “Infrequently.”

Scale Items

Items 15 – 47 request respondents’ agreement on a Likert scale to a variety of statements about their mentor, using the categories “1 - Strongly disagree,” “2 – Disagree,” “3 - Neither agree nor disagree,” “4 – Agree,” and “5 - Strongly agree.” This researcher treated the responses on the Likert scale as an interval level measurement and entered these values for data analysis.

Item 15 asked the respondent to respond to the statement, “My mentor treated me with respect.” The mean, median, and mode (4.64, 5.00, and 5.00 respectively) of the responses are close together, and the standard deviation of .716 indicates a narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 16 asked the respondent to respond to the statement, “My mentor was available when I needed help.” Again, the mean, median, and mode (4.46, 5.00, and 5.00 respectively) of the responses are close together, and the standard deviation of .711 indicates a narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 17 asked the respondent to respond to the statement, “My mentor and I

communicated frequently." The mean, median, and mode (4.10, 4.00, and 4.00 respectively) of the responses are exceptionally close together, and the standard deviation of .989 indicates a narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 18 asked the respondent to respond to the statement, "My mentor sometimes initiated contacts with me." The mean, median, and mode (4.10, 4.00, and 4.00 respectively) of the responses are exactly the same as the mean, median, and mode of the responses to Item 17. They are close together, and the standard deviation of .968 indicates a narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution. This narrow range clustered around a high score for both Items 17 and 18 indicates that the mentees felt uniformly positive about the communication with their mentors.

Item 19 asked the respondent to respond to the statement, "When I acted upon my mentor's advice, the results were usually good." The mean, median, and mode (4.34, 4.00, and 4.00 respectively) of the responses are close together, and the standard deviation of .677 indicates a narrow range to the responses. All but one of the respondents answered the question (n=79). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 20 asked the respondent to respond to the statement, "My mentor understood my job and its challenges and pressures." The mean, median, and mode (4.48, 5.00, and

5.00 respectively) of the responses are close together, and the standard deviation of .795 indicates a narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 21 asked the respondent to respond to the statement, "My mentor understood me." The mean and median are close together at 4.21 and 4.00 respectively; the mode is 1 score point higher at 5.00; this location is the result of a few low scores in the responses. Still, the standard deviation of .951 is less than one. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 22 asked the respondent to respond to the statement, "My mentor celebrated my successes." The mean and median are close together at 4.18 and 4.00 respectively; the mode is one score point higher at 5.00; this location is the result of a few low scores in the responses. Still, the standard deviation of .991 is less than one and indicates a relatively narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 23 asked the respondent to respond to the statement, "My mentor focused on my strengths, while helping me to strengthen my weaknesses." The mean, median, and mode (3.94, 4.00, and 4.00 respectively) of the responses are close together, and the standard deviation of 1.048 indicates a relatively narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the

variable is approximately normal in distribution.

Item 24 asked the respondent to respond to the statement, "My mentor helped me to think through problems to find my own solutions." The mean, median, and mode (4.04, 4.00, and 4.00 respectively) of the responses are close together, and the standard deviation of 1.024 indicates a relatively narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 25 asked the respondent to respond to the statement, "My mentor helped me to build skills as well as to solve immediate problems." The mean, median, and mode (4.05, 4.00, and 4.00 respectively) of the responses are close together, and the standard deviation of .926 indicates a narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 26 asked the respondent to respond to the statement, "Mentoring helped me to assume more job-related duties or responsibilities." The mean and median are close together at 3.96 and 4.00 respectively; the mode is one score point higher at 5.00; this location is the result of a few low scores in the responses. Still, the standard deviation of .999 is less than one and indicates a relatively narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 27 asked the respondent to respond to the statement, "Mentoring enabled me to achieve greater effectiveness on my job." The mean and median are close together at

4.15 and 4.00 respectively; there are two modes, one at 4.00 and one at 5.00, with only a few scattered low responses. Still, the standard deviation of .893 is less than one and indicates a relatively narrow range to the responses. All but one of the respondents answered the item (n=79). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 28 asked the respondent to respond to the statement, "Mentoring enabled me to derive more satisfaction from my job." The mean, median, and mode (3.83, 4.00, and 4.00 respectively) of the responses are close together, and the standard deviation of 1.003 indicates a relatively narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 29 asked the respondent to respond to the statement, "Mentoring enhanced my ability to support teachers in improving student achievement in measurable ways." The mean, median, and mode (3.96, 4.00, and 4.00 respectively) of the responses are close together, and the standard deviation of .898 indicates a relatively narrow range to the responses. All but one of the respondents answered the item (n=79). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 30 asked the respondent to respond to the statement, "I trusted my mentor." The mean, median, and mode (4.30, 4.50, and 5.00 respectively) of the responses are relatively close together, and the standard deviation of .892 indicates a relatively narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 31 asked the respondent to respond to the statement, "My mentor trusted me." The mean and median are close together at 4.25 and 4.00 respectively; the mode is one score point higher at 5.00; this location is the result of a few low scores in the responses. Still, the standard deviation of .869 is less than one and indicates a relatively narrow range to the responses. Analysis to the responses to Items 30 and 31 shows that the responses are very similar, as would be expected because of the reciprocal nature of trust. All but one of the respondents answered the item (n=79). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 32 asked the respondent to respond to the statement, "My mentor told me that he/she was learning from our work together." The mean, median, and mode (3.48, 3.50, and 3.00 respectively) of the responses are close together, and the standard deviation of 1.222 indicates a relatively narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 33 asked the respondent to respond to the statement, "My mentor was a person of integrity." The mean, median, and mode (4.41, 5.00, and 5.00 respectively) of the responses are close together, and the standard deviation of .791 indicates a narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 34 asked the respondent to respond to the statement, "My mentor was a compassionate person." The mean, median, and mode (4.40, 5.00, and 5.00 respectively) of the responses are close together, and the standard deviation of .851 indicates a narrow

range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 35 asked the respondent to respond to the statement, "I admired the work of my mentor." The mean, median, and mode (4.40, 5.00, and 5.00 respectively) of the responses are close together, and the standard deviation of .789 indicates a narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 36 asked the respondent to respond to the statement, "I found it easy to communicate with my mentor." The mean, median, and mode (4.38, 5.00, and 5.00 respectively) of the responses are close together, and the standard deviation of .919 indicates a narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 37 asked the respondent to respond to the statement, "My mentor communicated positively with others about me." The mean and median are close together at 4.14 and 4.00 respectively; the mode is one score point higher than the median at 5.00. Only four respondents (5.1%) indicated that they strongly disagreed or disagreed with the statement; 61 respondents (86.3%) indicated that they agreed or strongly agreed with the statement, and 36 strongly agreed, thereby accounting for the mode. The standard deviation of 1.009 indicates a relatively narrow range to the responses. All but one of the respondents answered the item (n=79). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 38 asked the respondent to respond to the statement, "My mentor informed me about career opportunities." The mean and median are separated by .56 at 3.44 and 4.00 respectively; the mode is one score point higher than the median at 5.00. Although the response choices were fairly evenly divided among the five categories, this location is the result of a few more respondents (23) choosing "Strongly Agree" than the other four categories. The standard deviation of 1.311 indicates a relatively narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 39 asked the respondent to respond to the statement, "As my mentor and I recognized that I was gaining more skills and confidence, my mentor provided less guidance to me." The mean, median, and mode are all exactly the same (4.00), and the standard deviation of .90 indicates a narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 40 asked the respondent to respond to the statement, "My mentor was in a position to help me advance to a higher level." The mean and median are close together at 3.70 and 4.00 respectively; the mode is one score point higher than the median at 5.00; this location is the result of 15 respondents answering "disagree" and 15 respondents answering "neither agree nor disagree" in their responses. The standard deviation of 1.216 indicates a relatively narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 41 asked the respondent to respond to the statement, "My relationship with my mentor changed over time so that I felt more like a peer to my mentor." The mean, median, and mode (3.96, 4.00, and 4.00 respectively) of the responses are close together, and the standard deviation of 1.031 indicates a relatively narrow range to the responses. All but one of the respondents answered the item (n=79). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 42 asked the respondent to respond to the statement, "My mentor provided both career and personal support." The mean, median, and mode (3.94, 4.00, and 4.00 respectively) of the responses are close together, and the standard deviation of 1.054 indicates a relatively narrow range to the responses. All but one of the respondents answered the item (n=79). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 43 asked the respondent to respond to the statement, "My mentor had high standards and great expertise." The mean and median are close together at 4.35 and 4.00 respectively; the mode is one score point higher than the median at 5; this location is the scattering of low responses. The standard deviation of .769 indicates a relatively narrow range to the responses. All but one of the respondents answered the item (n=79). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 44 asked the respondent to respond to the statement, "My mentor was a strong role model that I try to emulate." The mean, median, and mode (4.16, 4.00, and 4.00 respectively) of the responses are close together, and the standard deviation of .898

indicates a narrow range to the responses. All but one of the respondents answered the item (n=79). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 45 asked the respondent to respond to the statement, "I am still in contact with my mentor, or if my mentor were available, I would still be in contact with him/her." The mean, median, and mode (3.98, 4.00, and 4.00 respectively) of the responses are close together, and the standard deviation of 1.055 indicates a relatively narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 46 asked the respondent to respond to the statement, "I continue to discuss my work with my mentor, or if my mentor were available, I would continue to discuss my work with my mentor." The mean, median, and mode (3.90, 4.00, and 4.00 respectively) of the responses are close together, and the standard deviation of 1.223 indicates a relatively narrow range to the responses. All but two of the respondents answered the item (n=75). A review of the histogram confirms that the variable is approximately normal in distribution.

Item 47 asked the respondent to respond to the statement, "Overall, my mentoring experience was effective." The mean and median are close together at 4.19 and 4.00 respectively; the mode is one score point higher than the median at 5.00; this location is the result of three respondents answering "strongly disagree," one respondent answering "disagree," and ten respondents answering "neither agree nor disagree" in their responses. Sixty-seven respondents answered positively, either "agree" or "strongly

agree." The standard deviation of .956 indicates a relatively narrow range to the responses. All respondents answered the item (n=80). A review of the histogram confirms that the variable is approximately normal in distribution.

The responses to Items 15-47 were analyzed using a t test that showed no significant differences except for items 47, 46, 45, 44, 43, 42, 35, 30, 27, and 24. No difference was found after the summed scores were analyzed.

Table IV
T-Values and Their Probability for Comparison of Means Based On Gender for Questionnaire Items 15-47

Item Number	t_{calc}	p-value	Item Number	t_{calc}	p-value
15	.122	.903	32	1.190	.238
16	.228	.820	33	.534	.595
17	-.007	.995	34	.876	.384
18	.191	.849	35	.945	.347
19	-.129	.897	36	1.238	.220
20	1.097	.276	37	.554	.581
21	.187	.852	38	1.260	.211
22	.376	.708	39	-1.035	.304
23	.554	.581	40	.121	.904
24	.627	.532	41	2.249	.027
25	1.108	.271	42	-.174	.862
26	.708	.481	43	-.394	.695
27	1.431	.157	44	.190	.850
28	1.430	.157	45	.608	.545
29	1.083	.282	46	.422	.675
30	1.731	.087	47	.860	.392
31	1.151	.253			

Table V
T-Values and Their Probability for Comparison of Means Based On Race for Questionnaire Items 15-47

Item Number	t_{calc}	p-value	Item Number	t_{calc}	p-value
15	.749	.456	32	.990	.325
16	-.223	.824	33	-1.367	.176
17	.181	.857	34	-.447	.656
18	.042	.966	35	-1.856	.067
19	-1.156	.251	36	-.435	.664
20	-.364	.717	37	-.429	.669
21	-.116	.908	38	-1.097	.276
22	.089	.930	39	1.443	.153
23	.186	.853	40	-1.126	.264
24	-.477	.635	41	2.301	.024
25	-.102	.919	42	-.734	.465
26	.186	.853	43	-2.641	.010
27	1.001	.320	44	-1.762	.082
28	.428	.670	45	-.885	.379
29	.592	.556	46	-1.042	.301
30	.094	.925	47	-.063	.950
31	.542	.589			

The normal distributions that were observed in the exploratory data analysis facilitated the use of multivariate statistical analysis. Item 47 was analyzed using ANCOVA for Hypotheses One and Two. “Overall, my mentoring experience was effective” was the key determinant for accepting or rejecting Hypotheses One and Two. MANOVA was used to analyze Items 15 (respect), 30 (trust) and 47 concomitantly for Hypothesis Three.

In addition, the responses to Items 1-47 were graphed on histograms (See Appendix G) to give a visual display of the frequency of each of the responses. The responses to Item Number 48 were analyzed to determine themes and suggestions for further research.

Hypothesis Testing

Null Hypothesis One was stated as follows: There is no significant difference by mentee gender in the perceived effectiveness of the professional mentoring experiences of school administrators who have cross-race mentors and that of school administrators who have same-race mentors.

Descriptive information for the responses to Item 47 "Overall, my mentoring experience was effective" shows that the 57 female mentees (coded 1) responded at an average of 4.35 on a 5-point scale with a standard deviation of .745, while the 20 male mentees (coded 0) responded at an average with 4.18 on a 5-point scale with a standard deviation of .947.

For Hypothesis One, Levene's Test of Equality of Error Variances shows no difference in variance (F=.344, p=.559). This, together with the earlier determination that the variables were approximately normal, indicates that the results of an ANCOVA may be generalized. Therefore, the responses of the mentees who had mentors of the same gender and the responses of mentees who had mentors of the opposite gender were analyzed using race as a covariate in an ANCOVA.

The analysis of covariance (ANCOVA) generated a calculated F = .552 and p = .460 respectively, well above the .05 alpha. Therefore, the null hypothesis "there is no

significant difference by mentee gender in the perceived effectiveness of the professional mentoring experiences of school administrators who have cross-race mentors and that of school administrators who have same-race mentors" was not rejected. Since no significant difference was found in the ANCOVA, the hypothesis could not be rejected. Gender did not seem to have a significant impact on the mentee's perceived effectiveness of the mentoring experience when the effects of the race of the mentor were statistically controlled.

Table VI
Hypothesis One: Levene's Test of Equality of Error Variances
Dependent Variable: Item 47

F	df1	df2	Sig.
.344	1	75	.559

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Table VII
Hypothesis One: Analysis of Covariance Tests of Between-Subjects Effects
Dependent Variable: Question 47

Source	Type lll Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.245	2	.623	.768	.468
Intercept	737.728	1	737.728	909.844	.000
Cross_race	.794	1	.794	.979	.326
Gender	.447	1	.447	.552	.460
Error	60.001	74	.811		
Total	1433.000	77			
Corrected Total	61.247	76			

Null Hypothesis Two was stated as follows: There is no significant difference by mentee race in the perceived effectiveness of the professional mentoring of administrators who have cross-gender mentors and that of school administrators who

have same-gender mentors.

Descriptive information for the responses to Item 47 "Overall, my mentoring experience was effective" shows that the 30 African American mentees (coded 1) responded at an average of 4.33 on a 5-point scale with a standard deviation of .959, while the 45 Caucasian mentees (coded 0) responded at an average of 4.20 on a 5-point scale with a standard deviation of .726.

For Hypothesis Two, Levene's Test of Equality of Error Variances significant level of .153 is well above the alpha .05. This, together with the earlier determination that the variables were approximately normal, indicates that the results of an ANCOVA may be generalized. Therefore, the responses of the mentees who had mentors of the same race and the responses of mentees who had mentors of a different race were analyzed using gender as a covariate in an ANCOVA.

The analysis of covariance (ANCOVA) generated a calculated $F = .730$ and $p = .396$ respectively, well above the .05 alpha. Therefore, the null hypothesis "there is no significant difference by mentee gender in the perceived effectiveness of the professional mentoring experiences of school administrators who have cross-race mentors and that of school administrators who have same-race mentors" was not rejected. Since no significant difference was found in the ANCOVA, the hypothesis could not be rejected. Race did not seem to have a significant impact on the mentee's perceived effectiveness of the mentoring experience when the effects of the gender of the mentor were statistically controlled.

Table VIII
Hypothesis Two: Levene's Test of Equality of Error Variances
Dependent Variable: Item 47

F	df1	df2	Sig.
2.085	1	73	.153

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Table IX
Hypothesis Two: Analysis of Covariance Tests of Between-Subjects Effects
Dependent Variable: Question 47

Source	Type lll Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.901	2	1.450	2.209	.117
Intercept	825.922	1	825.922	1257.595	.000
Cross_gender	2.581	1	2.581	3.930	.051
Myrace1	.480	1	.480	.730	.396
Error	47.286	72	.657		
Total	1407.000	75			
Corrected Total	80.187	74			

Null Hypothesis Three was stated as follows: There is no significant difference in the perceived effectiveness of the professional mentoring experience, reported mentor respect, and expressed trust in the mentor of female African American school administrators and the perceived effectiveness of the professional mentoring experience, reported mentor respect, and expressed trust in the mentor of other school administrators.

Descriptive information for the responses to Item 15 “My mentor treated me with respect” shows that the 52 mentees who were not female African Americans (coded 0) responded at an average of 4.71 on a 5-point scale with a standard deviation of .498, while the 25 female African American mentees (coded 1) responded at an average of 4.52 on a 5-point scale with a standard deviation of 1.005.

Descriptive information for the responses to Item 30 "I trusted my mentor" shows that the 52 mentees who were not female African Americans (coded 0) responded at an average of 4.42 on a 5-point scale with a standard deviation of .696, while the 25 female African American mentees (coded 1) responded at an average of 4.16 on a 5-point scale with a standard deviation of 1.028.

Descriptive information for the responses to Item 47 "Overall, my mentoring experience was effective" shows that the 52 mentees who were not female African Americans (coded 0) responded at an average of 4.27 on a 5-point scale with a standard deviation of .717, while the 25 female African American mentees (coded 1) responded at an average of 4.12 on a 5-point scale with a standard deviation of 1.201.

For Hypothesis Three, Levene's test of equality of variances and the Box's M Test of Non-Sphericity show that there is approximate equality of variance; thus the data meets the MANOVA assumptions of homogeneity of variance.

The test for significance of the MANOVA analysis is a number of statistics commonly referred to as "trace." Various authors have slight differences in the formulae and common practice is to report multiple outcomes. This researcher requested the four most common from the SPSS software: Pillai's, Wilks', and Hotelling's traces and Roy's greatest root.

All four indicators show non-significance with $F_{3,73} = .84$ and a p-value of .476 indicating no significant differences between the group means of the three items in the presence of each other. Thus, the null hypothesis that "there is no significant difference in the perceived effectiveness of the professional mentoring experience, reported mentor

respect, and expressed trust in the mentor of female African American school administrators and the perceived effectiveness of the professional mentoring experience, reported mentor respect, and expressed trust in the mentor of other school administrators" was not rejected. Since no significant difference was found in the MANOVA, the hypothesis could not be rejected. When the three variables were analyzed together, no significant difference was found.

Table X
Hypothesis Three: Box's Test of Equality of Covariance Matrices

Box's M	30.399
F	4.801
df1	6
Df2	14797.693
Sig.	.000

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

Table XI
Hypothesis Three: Multivariate Tests

Effect		Value	F	Hypothesis df	Error Df	Sig.
Intercept	Pillai's Trace	.978	1072.702	3.000	74.000	.000
	Wilks' Lambda	.022	1072.702	3.000	74.000	.000
	Hotelling's Trace	43.488	1072.702	3.000	74.000	.000
	Roy's Largest Root	43.488	1072.702	3.000	74.000	.000
F AA	Pillai's Trace	.033	.851	3.000	74.000	.471
	Wilks' Lambda	.967	.851	3.000	74.000	.471
	Hotelling's Trace	.034	.851	3.000	74.000	.471
	Roy's Largest Root	.034	.851	3.000	74.00	.471

Table XII
Hypothesis Three: Multivariate Analysis of Variance Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Question 15	.659	1	.659	1.354	.248
	Question 30	1.105	1	1.105	1.673	.200
	Question 47	.353	1	.353	.440	.509
Intercept	Question 15	1449.377	1	1449.377	2977.524	.000
	Question 30	1249.105	1	1249.105	1890.025	.000
	Question 47	1194.097	1	1194.097	1489.146	.000
FAA	Question 15	.659	1	.659	1.354	
	Question 30	.1.105	1	.1.105	1.673	
	Question 47	.353	1	.353	.440	
Error	Question 15	36.995	76	.487		
	Question 30	50.228	76	.661		
	Question 47	60.942	76	.802		
Total	Question 15	1727.000				
	Question 30	1516.000	78			
	Question 47	1449.000	78			
Corrected Total	Question 15	37.654	77			
	Question 30	51.333	77			
	Question 47	61.295	77			

Twenty-three respondents answered Item 48, which asked for the respondents to share other information about mentoring. Ten of the twenty-three responded extremely positively about their mentoring experience; nine responded in a neutral manner, mostly to provide clarifying details about the mentoring experience. Only one responded that her experience had been extremely negative. Three respondents indicated that the district did not provide them with a mentor and that they believed that having a mentor would have been a positive experience. One of the ten respondents who responded positively indicated that she was not assigned a mentor, but that she found her own mentor. One of the nine respondents who answered in a neutral way indicated that she did not have a mentor, but that other co-workers helped her with expectations and interpretations of

policies and procedures. Another who responded in a neutral way indicated that mentoring would have been more helpful had her mentor been someone who knew her content area.

The most common theme of the responses was that administrators realized that mentors could be very positive forces in their lives. Ten of twenty-three were grateful that they had had mentors who had made a positive difference in their careers. Some of their comments follow.

Comments from a Caucasian male administrator with a Caucasian female mentor: "The best part of my experience with my mentor was that I knew she valued my skills and wanted me to get better because she saw that I was also capable of teaching and working well with adults. Several of my career choices have been made because of the initial support she gave me. It helped that my mentor was involved in the same content area that I was, and she was someone I could turn to."

Comments from a Caucasian female administrator with a Caucasian female mentor: "My mentoring experience was truly by accident. I don't remember being told I would have a mentor she just assumed that role. I was confident that I could call on her for support, and she was ALWAYS available to talk to me about whatever my concerns were. My direct supervisor was also like a mentor to me. Dr. ------- took the time to listen, ask probing questions and was confident in my decision making."

Comments from a Caucasian female administrator with a Caucasian male mentor: "My mentor did not make decisions for me. He trusted me but also knew that I had to learn from my own mistakes. At times I was aggravated, wanting him to tell me what to

do but he made me stand on my own two feet. I am a lot calmer than he was, and a bigger worrier. He accepted me for who I was and he could use respectable humor to de-escalate at the end of a rough day. I admire him and learned a great deal from him."

Comments from a Caucasian female administrator with an African American female mentor: "My mentor was fabulous. She provided support in many and various ways. I always felt like she trusted me and guided me."

Comments from an African American female administrator with an African American female mentor: "My mentor was a friend long before I related to her as a mentor. The word mentor was never spoken between the two of us. I feel certain that she would not use the word mentor in a description. When I needed explanations, information, and/or guidance I would contact her. I also feel certain that the friendship made it more comfortable for me to see her as a mentor."

Comments from an African American male administrator with an African American female mentor: "I would not be in the position I currently hold without my mentor."

Comments from an African American female administrator with a Caucasian female mentor: "My mentor is a former employee of the school district and she has a lot of experience working with several surrounding districts. She is highly intelligent and well respected in the community. I find that I learn a lot from her knowledge and expertise."

Comments from an African American female administrator with a Caucasian female mentor: "Mentoring is an invaluable experience. I have had different mentors

throughout my life and they all were very appropriate for that stage of my life and my career. I believe that mentors are ESSENTIAL to the growth and development of leaders."

Clearly these administrators, who represent both races and genders in the study, found mentoring to be very valuable, both personally and professionally. Their positive comments verify the major functions of mentoring identified by Kram (1983, 1985), as cited in Chapter 1. The one negative response follows, and it seems to reflect a personality conflict.

Unidentified race female administrator with African American female mentor: "Unfortunately, my mentor was not supportive at all. I found it to be an extremely uncomfortable situation whenever I had to converse with her. I would never emulate her at all. My mentor was more of a dictator than that of one willing to establish an open relationship. If she could have had her way, then I still would be a classroom teacher and not that of an Instructional Specialist. Toward the end of my tenure with her, I was more devastated as a person than I was when I was not in her presence. It is my belief that my mentor was somewhat jealous of the rapport that I had established with the parents and students. If I had my way, I would like to select my own mentor, and I don't believe she would be an African American."

The others either felt neutral about the mentoring experience or wished that they had had a mentor. Comments indicating that the respondent did not have a mentor were all from females, most of them from African American females, and from respondents who did not identify race or gender. This seems to corroborate the literature which stated

that women are less likely than men to receive encouragement and mentoring. (Sadker, Sadker, and Klein, 1991). It also corroborates the research that described the situation as even worse for African American females. (Marshall, 1985; Wolfman, 1997)

Chapter 5

Summary, Conclusions, and Recommendations

Purpose

The purpose of this study is to determine the perceived effectiveness of the professional mentoring that female African American school administrators and other school administrators have received in their school districts.

Research Questions and Hypotheses

In order to assess the perceived effectiveness of the professional mentoring experiences of African American female school administrators, the following research questions were developed.

1. Does the composition of gender pairing (same or opposite gender) make any difference in whether school administrators with same-race mentors perceive their mentoring experiences to be as effective as that of school administrators with cross-race mentors?
2. Does the composition of racial pairing (same or different race) make any difference in whether school administrators with same-gender mentors perceive their mentoring experiences to be as effective as that of school administrators with cross-gender mentors?
3. Do female African American school administrators perceive their professional mentoring experiences to be as effective as other school administrators do; do they perceive that their mentors treat them with as much respect as the mentors of other school administrators do; and do they trust their mentors as

much as other school administrators trust their mentors?

In order to test the significance of the perceived effectiveness of the professional mentoring experiences of African American female school administrators, the following hypotheses were created.

1. There is no significant difference by mentee gender in the perceived effectiveness of the professional mentoring experiences of school administrators who have same-race mentors and that of school administrators who have cross-race mentors.
2. There is no significant difference by mentee race in the perceived effectiveness of the professional mentoring of school administrators who have same-gender mentors and that of school administrators who have cross-gender mentors.
3. There is no significant difference in the perceived effectiveness of the professional mentoring experience, reported mentor respect, and expressed trust in the mentor of female African American school administrators and the perceived effectiveness of the professional mentoring experience, reported mentor respect, and expressed trust in the mentor of other school administrators.

The population sample for this study consisted of all the certified and non-certified administrators in a large Midwestern suburban school district. Consent forms (See Appendix D) were distributed to 119 certified and non-certified administrators in the school district. One hundred twelve administrators returned the consent forms; they then

received the link to the 48-item mentoring survey (See Appendix B) in electronic form delivered to their school district email addresses. Eighty-three of the administrators completed the surveys via SurveyMonkey™ (1999-2011) for a 70% return rate.

The totals of the gender-racial groups completing the survey were as follows: African American females = 28; African American males = 6; Caucasian females = 32; Caucasian males = 14; respondents not identifying race and/or gender = 3.

Three of the 83 questionnaires were unusable because of their responses. Two of the three respondents with unusable questionnaires answered only Items 1 (my race), 3 (my gender), 5 (my age), and 7 (certification) and responded to Item 48, indicating that they could not respond to other items because of lack of a mentor. The third respondent with an unusable questionnaire responded to Items 15 through 47 with all neutral "neither agree nor disagree" answers, appeared to identify a mentor in Items 6 and 8, but then responded to Item 48, indicating that no mentor was assigned.

Removing these three respondents from the total of 83 who answered the survey left a total of 80 respondents whose questionnaires were analyzed for the exploratory data analysis, yielding an effective completion rate of 67% for exploratory data analysis. This exploratory data analysis determined that the responses displayed reliability and internal consistency reliability.

Three more respondents were removed before the statistical data analysis for the three hypotheses because they did not identify race and/or gender, yielding a final sample of 77 and an effective return rate of 65% for the statistical data analysis for Hypotheses One and Two.

The analysis of data for Hypotheses 3 compared the responses of the female African American mentee administrators to the responses of all other administrators. Four of the African American females who completed the survey provided incomplete responses, so their questionnaires could not be compared to those of the other administrators, yielding a population of 24 female African Americans for the comparison in Hypothesis Three.

Conclusions

Hypothesis One stated that there is no significant difference by mentee gender in the perceived effectiveness of the professional mentoring experiences of school administrators who have cross-race mentors and that of school administrators who have same-race mentors.

Seventy-seven respondents were included in the analysis for this hypothesis; twenty of them were male and fifty-seven were female. Twenty-eight of these had same-race mentors, and forty-seven had cross-race mentors. The responses to Item 47 "Overall satisfaction with the mentoring program" indicated a mean score of 4.00 and 4.60 respectively. The mean score representing the satisfaction of African American female administrators with same-race mentors was higher than the mean score representing the satisfaction of African American females with cross-race mentors. A contributing factor could be that mentors of the same ethnicity as their protégés appear to be more sensitive regarding career development issues, as Papelweis (1991) claimed. However, the African American women in the study by Allen, Jacobson, & Lomotey (1995) stated that the race or gender of a mentor or sponsor was unimportant to them. In interviews conducted by

Wilcox (2002), some respondents indicated that race was a factor, while others indicated that it was not. While studying the effects of mentor commitment and program understanding, Allen, Eby, and Lentz (2006) found that race and ethnicity did not account for significant variance on the perceived effectiveness of mentoring by either the mentor or the protégé. Similarly, while the mean score representing the satisfaction of African American female administrators with same-race mentors was higher than the mean score representing the satisfaction of African American female administrators with cross-race mentors, the difference was not statistically significant, which is consistent with the mixed literature on the topic of cross-race mentoring. Finally, an ANCOVA measured the difference in the perceptions of mentoring effectiveness between mentees who had same gender mentors and mentees who had mentees of a different gender, while controlling for the effects of race as a covariate. The ANCOVA revealed no significant difference in the perceived effectiveness of mentoring experiences between the two groups of mentees. Thus, Hypothesis One's claim, that there is no significant difference by mentee gender in the perceived effectiveness of the professional mentoring experiences of school administrators who have cross-race mentors and that of school administrators who have same-race mentors, was not rejected.

Hypothesis Two stated that there is no significant difference by mentee race in the perceived effectiveness of the professional mentoring of school administrators who have same-gender mentors and that of school administrators who have cross-gender mentors.

The satisfaction of African American female administrators with their cross-gender mentors was higher than their satisfaction with same-gender mentors as measured

by the mean, but the difference was not statistically significant. The higher satisfaction of African American female administrators with cross-gender mentors may reflect the females' recognition that the power structure is primarily male, combined with their determination to succeed in that structure, as Lankau and Scandura (2007) and Enomoto, Gardiner, and Grogan (2000) suggested. Possibly, the male mentors had learned to navigate the cultural boundaries of gender that Crutcher (2007) described and to build the trust that Schramm (2000) identified because of the training provided by the district. It is even possible that the mentoring pairs were luckily well-matched.

Using an ANCOVA to measure the difference in the perceptions of mentoring effectiveness between mentees who had same race mentors and mentees who had mentees of a different race, while controlling for the effects of gender as a covariate, no significant difference appeared in the perceived effectiveness of mentoring experiences between the two groups of mentees. Thus, Hypothesis Two's claim, that there is no significant difference by mentee race in the perceived effectiveness of the professional mentoring of school administrators who have same-gender mentors and that of school administrators who have cross-gender mentors, was not rejected.

Hypothesis Three stated that there is no significant difference in the perceived effectiveness of the professional mentoring experience, reported mentor respect, and expressed trust in the mentor of female African American school administrators and the perceived effectiveness of the professional mentoring experience, reported mentor respect, and expressed trust in the mentor of other school administrators.

The responses to Item 47 "Overall satisfaction with the mentoring program"

indicated a mean score of 3.70 for female African American administrators who had cross-race, same gender mentors and 4.57 for female African American administrators who had same-race, same gender mentors. As was the case with Hypothesis 1, this finding was consistent with the mixed findings in the literature (Papelweis, 1991; Allen, Jacobson, & Lomotey, 1995; Wilcox, 2002; Allen, Eby, and Lentz, 2006). To compare the perceptions of female African American administrators with the effectiveness of their mentoring experiences, along with the important variables of mentor respect and trust in the mentor, with the perceptions in those variables of all other school administrators, a MANOVA was conducted on the survey results. The MANOVA indicated no significant differences between the group means of the three variables in the presence of each other. Thus, Hypothesis Three's claim, that there is no significant difference of the professional mentoring experience, reported mentor respect, and expressed trust in female African American school administrators and other school administrators was not rejected.

Most of the literature indicated that successful cross-race, cross-gender mentoring relationships are possible if there is a trusting relationship (Allen, Jacobson, & Lomotey, 1995; Edelman, 2002; Boags, 2008). Trust is typically the result of the participants respecting and understanding each other. As Holmes, Land, and Hinton-Hudson (2007) concluded, it is not important that the mentor is Black or White or male or female. What does matter is that the mentor is genuine and seeks to assist the protégé in having a successful career. That is the major conclusion of this study.

Discussion

The literature is mixed on the topic of whether matching the race and gender of

the mentor and mentee is likely to predict a positive mentoring relationship. African American women in the study by Allen, Jacobson, & Lomotey (1995) stated that the race or gender of a mentor or sponsor was unimportant to them. In interviews conducted by Wilcox (2002), some respondents indicated that race was a factor, while others indicated that it was not. In a large study in a hospital setting (Koberg, Boss, Chappell, & Ringer, 1994) minority mentees reported a number of outcomes at higher levels than their White counterparts. These mentoring outcomes included the degree to which a mentor provided exposure and visibility, sponsorship, protection, and challenging assignments to the mentee. The authors suggested that these findings might have resulted from the effects of two decades of antidiscrimination legislation and an organization with unusually high concern for and involvement in diversity issues.

Although the subgroup population of female African Americans of this study is small, this study adds to the body of literature that indicates that race and gender of a mentor does not make a significant difference in the perceived effectiveness of the mentoring experience for African American female school administrator mentees.

Several factors may have influenced the outcome of this study. The district in which the respondents were employed had been engaged in intensive diversity professional development for the previous six to eight years. Virtually all administrators had completed the "Dismantling Racism Institute for Educators," and some had completed several sessions and/or helped with training. For several years prior to the study, district administrators and teachers had been attending training on culturally responsive education with Dr. Sharroky Hollie, the executive director of the Center for

Culturally Responsive Teaching and Learning and co-founder of the Culture and Language Academy of Success in Los Angeles. Dr. Hollie's training is based on the Linguistic Affirmation Program of the Academic English Mastery Program developed in the Los Angeles Unified School District in 1999. The training is described by Dr. Hollie in articles in *The English Journal* (2001b) and *Academic Exchange Quarterly* (2001a) and on the website of The Center for Culturally Responsive Teaching and Learning at www.cultureandlanguage.org/CRPofferings.html (Hollie, n.d.)

All of this diversity training enabled the administrators to be more skillful in cross-cultural, cross-gender communication. The diversity training also helped the administrators to understand the importance of building respect and trust in professional relationships.

The district had also developed its own inclusiveness training for teachers, Respecting Everyone's Strengths through a Partnership of Expectations, Commitment, and Teamwork (RESPECT). In addition, the district had conducted book studies on works such as *Courageous Conversations About Race* by Glenn E. Singleton and Curtis Linton (2006). These were just a few examples of the ongoing efforts of administrators and teachers to learn more about working in a culturally diverse setting. The student body was approximately 70% African American. Teachers and administrators participated in programs designed to increase minority academic success and enrollment in college, such as the Close the Gap Consortium, GEAR-UP, Project Lead the Way, and Project Success. All of these initiatives in which teachers and administrators learned how to increase the academic success of minority students also built the skills of

administrators so that they could understand, work with, and mentor other administrators across gender and racial lines. More importantly, these efforts built the culture where cooperating and supporting others across those lines was the expectation and the norm. This work enabled administrators to cross the cultural boundaries that Crutcher (2007) described and to build trust across gender and racial lines, as Schramm (2000) advocated. Even though the previous superintendent had retired from the district, her dedication to equity and diversity professional development continued to have a positive impact on the respondents of the survey.

On the other hand, responses to Item 48 on the survey indicated that several African American female administrators did not have mentors and that they felt the lack of a mentor to be a detriment personally and professionally. These comments corroborated the literature which indicates that it is much more difficult for females and minorities to find mentors and that they believe that they would benefit from having a mentor. Since the researcher is providing the results of the study to the research district, district personnel will be aware of the need to follow up with female and minority administrators to verify that the mentoring relationship exists and that they perceive their mentoring experience to be effective. Clearly, having a mentor is a need felt by African American female administrators who participated in this survey. The high number of responses of "Agree" and "Strongly agree" indicates that African American female administrators who had mentors perceived their mentoring experiences to be effective. This study will be shared with the school district that was the subject of the study so that the district leaders can continue and improve upon the work that they have begun.

In the section *Delimitations of the Study* in Chapter One, an identified delimitation of the study is that participation is voluntary. People with more positive attitudes may be more likely to complete and return a survey. Therefore, they were more likely to self-report positive outcomes. The self-reporting process is another delimitation. All data is from self-reporting with no other data to verify the self-reporting. Both may have led to a more positive outcome of the reflection on mentoring experiences. While the district has a larger than average number of African American female administrators for this suburban Midwestern region, it is still a small number for statistical purposes of comparison. Further studies on the topic of perceived effectiveness of mentoring across racial and gender lines are definitely needed, as demographic experts predict that the administrative staff, teaching staff, and student body will become increasingly diverse in the United States. Studies should also be expanded to include mentoring across racial and gender lines for other racial/ethnic minority educators, such as Hispanic Americans, Asian Americans, and Native Americans.

As mentioned in Chapter 2, Higgins and Kram (2001) predicted the increased importance of entrepreneurial developmental networks because of twenty-first century changes in the current career environment related to the lack of job security, the rapid pace of change in information and digital technologies, the changing nature of organizational structures, and the increasing diversity in the workplace. Burt (1992) defined entrepreneurial developmental networks as social networks that span multiple groups or sub-networks. Higgins and Kram (2001) stated that entrepreneurial networks are made up of developers who are highly motivated to act on behalf of their protégés and

who provide access to a wide array of information. They indicated that entrepreneurial developmental networks have the capacity to impact four important protégé career outcomes: career change, personal learning, organizational commitment, and work satisfaction.

Literature cited in Chapter 2 indicate that African American female school administrators have relied on networks that included church, family, and community, and most recently, formal mentors appointed by organizations. It will be a natural next step for African American women educators to use an entrepreneurial developmental network. Such networks can provide an answer for women and minority education administrators who have difficulty finding mentors. It will be an important resource for school districts such as the one in this study with high diversity. Even though the school district in this study had high diversity, the number of African American female administrators is small. Entrepreneurial developmental networks will enable districts and individual educators to fill their mentoring needs. It is imperative that we support African American female school administrators because of their promise in reforming education to provide an academically challenging education for all students. For that reason, it is recommended that public school districts enter into entrepreneurial developmental networks.

Recommendations For Further Study

This study should be replicated in school districts that do not have a high African American student population. The experiences of cross-race, cross-gender administrative mentoring in a district with a low African American student population will help to determine whether the professional development for working with diverse students

enables staff to build trust and work cooperatively with each other. As a corollary, the study should be repeated in school districts of a variety of sizes and demographics to determine the possible effectiveness of cross-race/cross-gender mentoring in a variety of educational settings and to prepare for the increasing diversity that our country is predicted to experience during the next century. In addition, replication of the study will improve the generalizability of these results.

Will similar results be realized if the study occurs in a district that has not had the abundance of diversity training experienced by the district in the study? This study should be replicated in districts that have and have not engaged in intensive diversity professional development to analyze the impact of professional development on inclusiveness on the quality of intra-staff relations. Such a study would show the impact of a major professional development technique, mentoring.

As Noe (1988b) found, successful formal mentoring programs must have top management support, careful selection of mentors and protégés, an extensive orientation program to develop realistic expectations of the mentoring program, clearly stated responsibilities for both mentor and protégé, and established minimum duration and frequency of contact between mentor and protégé. The support of top management must be unwavering in the expectation that minority staff will be hired, welcomed, and developed. In addition, training for the mentor and mentee on maximizing the mentoring relationship should be ongoing. Ortberg (2003) cautioned that mentors must not attempt to fix or control their protégés or to pretend that they are what they are not. Lindsay (1994) stated that professional development and education programs for gender and racial

minorities, such as mentoring, will help to remedy the exclusionary practices that exist in educational administration and will help female racial minorities to succeed in educational administration. As Noe (1988b) suggested, Title VII of the Civil Rights Act of 1964 provides a legal basis for the mentoring for women and minorities in cases such as *Watkins v. Scott Paper Company* (1976) and *Carter v. Shop-Rite Foods* (1979). The *Watkins v. Scott Paper Company* decision states that courts (and therefore employers) "must strive, however, to cut beneath the facade of good faith, counteract the 'built-in headwinds' of racial bias, and prevent discriminatory consequences." (Section 186) Many employers have used mentoring as a method of counteracting racial and gender bias and providing advancement opportunities for women and minorities. However, Enomoto, Gardiner, and Grogan (2000) agreed that if mentoring is to be considered useful for women and minorities, the relationship must help them in negotiating through predominantly White male administrations.

This study should be replicated with responses from both the mentees and the mentors with the responses matched, analyzed, and triangulated with student responses and student achievement to analyze the effectiveness of the mentoring. Having the mentees self-report on the effectiveness of the mentoring experience is only one-half of the equation of the relationship. Since the ultimate measure of effectiveness is the success of the students, both student responses and academic achievement should be part of the measure of the effectiveness of the mentoring. The research would have to be carefully designed to identify the student achievement that the administrative mentee can affect.

Finally, school districts should harness the power of the social media revolution, as described in the Socialnomics YouTube Social Media Revolution video, *Is Social Media A Fad?* (2009). Higgins and Kram (2001) conceived a framework nearly ten years ago that illustrated the combination of social networks theory (multiple relationships, diversity, tie strength) with research on mentoring. Younger mentees who use social media may relish the idea of a developmental network for mentoring; it will also be congruent with the growth of online learning opportunities in our schools. A study comparing the effectiveness of entrepreneurial developmental networks to traditional mentoring situations for African American female educators should be conducted. It is our future, and it is here now.

Appendix A

Job Descriptions

The job categories and a summary of each position follow. The Human Resources Department of the school district in the study provided the job descriptions. The number in parentheses after each job category indicates the number of people who serve in that position.

Superintendent (1): Administers as chief school executive, the development and maintenance of a positive educational program designed to meet the needs of the community and to carry out the policies of the Board, providing leadership in developing and maintaining the best possible educational programs and services. Formulates school objectives, policies, plans, and programs; prepares (or causes to be prepared) and presents facts and explanations necessary to assist the Board in its duty of legislation for the schools. Advises the Board on the need for new or revised polices and sees that all polices of the Board are implemented. Supervises the implementation of all laws, regulations, and Board policies. Supervises directly or indirectly, every district employee. Makes all administrative decisions within the district necessary to the proper function of the school district.

Associate Superintendent, Curriculum and Instruction (1): Performs duties to assist the Superintendent, substantially and effectively in the task of providing the best possible instruction and professional development program; the objective being to ensure that each student enrolled from early childhood through grade 12 receives the best educational experience the school district can provide.

Assistant Superintendent, School Accountability (3): Performs duties to assist the Superintendent, substantially and effectively in the task of providing the best possible educational programs; the objective being to ensure that each student enrolled from early childhood through grade 12 receives the best educational experience the school district can provide.

Assistant Superintendent of Student Services (1): Performs duties to plan and organize all phases of student services K-12. These include the coordination of orientation programs; educational, guidance and counseling; enrollment and residency, school safety, health services, social-emotional and related activities; including services to special needs students.

Assistant Superintendent, Human Resources (1): As Chief Human Resources Administrator, performs duties to recruit, select, place, train, compensate, evaluate and support all district personnel, while protecting the district from legal threats related to employment.

Assistant Superintendent, Finance and Facilities (1): Supervises and coordinates efforts of the business office and facilities (purchasing, warehouse, transportation, child nutrition services, maintenance, and custodial services) staff to influence the most effective school district operations and educational program.

Assistant Superintendent for Communication Services (1): Performs duties to assist the Superintendent, substantially and effectively in the task of generating in the community at large a climate of understanding of the district's efforts to provide each

student with the best possible education in an increasingly complex and sophisticated society.

Assistant Superintendent of Data and Technology (1): Coordinates District testing program. Performs duties to plan and organize all phases of the selection, implementation, and installation of all data and technological products for the district to ensure secured data, increased effectiveness, and efficiencies to the ultimate benefit of the educational program.

Director of Federal Programs and Early Childhood Education (1): Performs duties to assist the Assistant Superintendent of Accountability, substantially and effectively in the task of providing the best possible educational programs. The objective is to ensure that each student enrolled from early childhood through grade 12 receives the best educational experience the school district can provide through Federal Programs and Early Childhood Education.

Safe Schools/Healthy Students Project Director (1): Oversees the vision, daily operations, implementation and evaluation of the Safe Schools/Healthy Students project in accordance with Board Policy and project provisions.

Director of Gifted & ELL K-12 (1): Performs duties to assist the Assistants Superintendent of Accountability, substantially and effectively in the task of providing the best possible educational programs for both gifted and English Language Learners (ELL) as two district-wide programs; the objective being to ensure that each student enrolled from early childhood through grade 12 receives the best educational experience the school district can provide.

Principal, Senior High School (3): Provides educational leadership to effectively develop and present the best possible educational programs, to ensure that each student enrolled in grades 9 through 12, receives the best educational experience the school can provide; supervises grades 9 through 12, associate and assistant principals, department managers, instructional coaches, teachers, and auxiliary personnel employed in the school.

Principal, Middle School (6): Provides educational leadership to effectively develop and present the best possible educational programs to ensure that each student enrolled receives the best educational experience the school can provide; supervises grades 6-8, assistant principals, department managers, instructional coaches, teachers, and auxiliary personnel employed in the school.

Principal, Elementary School (20): Provides educational leadership to effectively develop and present the best possible educational programs to ensure that each student enrolled receives the best educational experience the school can provide, supervises grades K-5, instructional coaches, teachers, and auxiliary personnel employed in the school.

Associate Principal, High School (3): Assists the principal in providing the best possible educational programs to ensure that each student enrolled receives the best educational experience the school can provide; supervises grades 9 through 12 and assistant principals, department managers, instructional coaches, teachers, and auxiliary personnel employed in the school.

Assistant Principal, High School (13): Assists the principal in providing the best possible educational programs to ensure that each student enrolled receives the best educational experience the school can provide; supervises grades 9 through 12 and department managers, instructional coaches, teachers, and auxiliary personnel employed in the school.

Assistant Principal, Middle School (17)**:** Assists the principal in providing the best possible educational programs to ensure that each student enrolled receives the best educational experience the school can provide; supervises grades 6 through 8 and department managers, instructional coaches, teachers, and auxiliary personnel employed in the school.

Activities Director, High School (3): Provides educational leadership to effectively oversee all aspects of all co-curricular activities (to include clubs, athletic teams, dances, games, plays and concerts) at the assigned school, for the purpose of providing the best possible educational experience for students.

Early Childhood Education Site Coordinator (3): Assists the Director of Federal Programs and Early Childhood Education in the administration, operation, evaluation, and supervision of all early childhood education programs to ensure that they meet the special needs of eligible children and encourages and recommends program improvements. Assists the Director with applying for and the implementation of the state and federal grants which fund the Elementary Special Programs, in preparing and filing reports required by federal, state and local regulations, and in the development of an annual budget. Assists the Director in supervising program-sponsored activities,

including those occurring before and after normal school hours, and in supervising therapeutic and other special intervention programs to ensure that eligible students receive adequate services as dictated by their IEP's. Assists the Director in the evaluation of personnel under his/her direction for the purpose of improvement of instruction and reemployment.

*Instructional Coach (27): A*dvocates for, facilitates, and supports the work of the teacher, but never performs supervision or evaluation. The role of evaluator is the sole responsibility of the principal/supervisor.

Curriculum Coordinator (6): Performs duties to plan, coordinate, and assist the professional staff members toward the development of a curriculum and an instructional program which will maximize the learning situation for each student.

Director of Enrollment (1): Performs duties to coordinate and manage plans, programs, and strategies designed to provide a seamless enrollment process.

Director of Human Resources (1): Performs duties to protect the district from legal harm and assist the Assistant Superintendent, Human Resources in coordinating the implementation of services, policies, and programs through Human Resources staff; and assists and advises administrators and others about Human Resources issues.

Director of Management Information Systems (1): Directly responsible to the Assistant Superintendent of Data and Technology. Performs duties to initiate and ensure strategic planning and implementation of instructional and administrative publications and the unique applications of technology in the educational environment.

Director of Student Information Systems (1): Directly responsible to the Assistant Superintendent of Data and Technology. Assists the Assistant Superintendent of Data and Technology with concentration in the area of the district-wide student information system and data analysis to facilitate program evaluation and school improvement.

Director of Safety and Security (1): Performs duties to coordinate and manage plans, programs and strategies designed to provide a safe and secure learning and working environment.

Director of Transportation (1): Performs duties to supervise the total operation of the transportation department for the benefit of students, by observing the policies adopted by the Board of Education and rules and regulations of the Missouri Department of Elementary and Secondary Education.

Assistant Director of Transportation (1): Performs duties to supervise the operational areas of the transportation department as assigned by the Director, and assumes the function of the Director in his/her absence.

Director of Child Nutrition Services (1): Performs duties to supervise the total operation of the food service department for the benefit of the students, by establishing the preparation and serving of an attractive, nutritious lunch at a reasonable cost.

Assistant Director of Child Nutrition Services (1): Under the general supervision of the director, assist in managing the operations of the Child Nutrition Services department.

Director of Maintenance (1): Administers the District's maintenance program, by managing the performance of all designated routine, emergency and preventative maintenance activities; includes building structures, grounds, service equipment, utilities, sanitation, material handling; and compliance with all safety regulations, pollution codes and applicable government regulations; and minimization of energy expenditures.

Assistant Director of Maintenance (1): Performs duties to supervise areas of operation of the maintenance department as assigned by the Director; assumes the function of the Director in his/her absence.

Director of Custodial Services (1): Performs duties to supervise the housekeeping and custodial operations of all buildings in the District.

Assistant Director of Custodial Services (1): Performs duties to supervise areas of operation of the custodial department as assigned by the Director; assumes the function of the Director in his/her absence.

Director of Accounting and Finance (1): Performs duties to assist the Assistant Superintendent, Finance and Facilities, in his/her duties in the areas of accounting, budgeting, finance, payroll and office management; prepares financial reports and audited District financial statements.

Director of Purchasing and Supplier Diversity (1): Oversees all District purchasing policies and procedures. Drives District supplier diversity initiatives through relationship building, sound contract and purchasing decisions, accurate recordkeeping, and identification of partnership opportunities that are in the best interests of the District.

Lead Nurse (1): Responsible for the coordination of comprehensive health services in the school environment. Provides training, support and management of all school nurses. Reports to the Assistant Superintendent of Student Services.

Appendix B

Mentor Survey

1. My race (check √ one):

___African American ___Caucasian ___Hispanic ___ Asian American
___ Native American ___Other

2. Race of my primary (main) mentor (check √ one):

___African American ___Caucasian ___Hispanic ___ Asian American
___ Native American ___Other

3. My gender (check √ one): ___Female ___Male

4. Gender of my mentor (check √ one): ___Female ___Male

5. My age (check √ one): ___25-35 ___ 36-45 ___ 46-55 ___56-65 ___66+

6. Age of my mentor (check √ one): ___25-35 ___ 36-45 ___ 46-55 ___56-65 ___66+ ___Don't Know

7. My teacher certification status (check √ one): ___ Certified ___ Non-certified

8. Type of mentoring program (check √ one):

   ___Informal/spontaneous, established by two individuals
   ___Formal relationship, established by the district or another organization
   ___Hybrid relationship, combining spontaneous and formal relationship

9. Length of mentoring relationship: ___# of months ___# of years ___other (please explain)_____
   _____

10. Frequency of mentoring contacts (check √ one):
___Daily ___Several times a week ___Weekly ___Several times a month ___Monthly ___Infrequently

11. Most frequent method of communication with my mentor (check √ one):
___ Face-to-face ___ Telephone ___ Texting ___ Email

12. Are you still in the mentoring relationship? (check √ one) ___Yes ___No

13. If not, how long ago did the mentoring relationship end?
___ 1-6 months ____7-12 months ____ 1-2 years ____ 2-5 years ____ 5+ years

14. If you are still in contact with your mentor, indicate how frequently. (check √ one)
___Daily ___Several times a week ___Weekly ___Several times a month ___Monthly ___Infrequently

Using the Likert scale below, please mark the response (1 – 5) that best describes your mentoring experience in the blanks in front of Items # 15-47.

Likert Scale 1-Strongly disagree 2-Disagree 3-Neither agree nor disagree 4-Agree 5-Strongly agree

15. ____ My mentor treated me with respect.
16. ____ My mentor was available when I needed help.
17. ____ My mentor and I communicated frequently.
18. ____ My mentor sometimes initiated contacts with me.
19. ____ When I acted upon my mentor's advice, the results are usually good.
20. ____ My mentor understood my job and its challenges and problems.
21. ____ My mentor understood me.
22. ____ My mentor celebrated my successes.
23. ____ My mentor focused on my strengths, while helping me to strengthen my weaknesses.
24. ____ My mentor helped me to think through problems to find my own solutions.
25. ____ My mentor helped me to build skills as well as to solve immediate problems.
26. ____ Mentoring helped me to assume more job-related duties or responsibilities.
27. ____ Mentoring enabled me to achieve greater effectiveness on my job
28. ____ Mentoring enabled me to derive more satisfaction from my job.
29. ____ Mentoring enhanced my ability to support teachers in improving student achievement in measurable ways.
30. ____ I trusted my mentor.
31. ____ My mentor trusted me.
32. ____ My mentor told me that he/she was learning from our work together.

33. ____ My mentor was a person of integrity.
34. ____ My mentor was a compassionate person.
35. ____ I admired the work of my mentor.
36. ____ I found it easy to communicate with my mentor.
37. ____ My mentor communicated positively with others about me.
38. ____ My mentor informed me about career opportunities.
39. ____ As my mentor and I recognized that I was gaining more skills and confidence, my mentor provided less guidance to me.
40. ____ My mentor was in a position to help me advance to a higher level.
41. ____My relationship with my mentor changed over time so that I felt more like a peer to my mentor.
42. ____ My mentor provided both career and personal support.
43. ____ My mentor had high standards and great expertise.
44. ____ My mentor was a strong role model that I try to emulate.
45. ____ I am still in contact with my mentor, or if my mentor were available, I would still be in contact with him/her.
46. ____ I continue to discuss my work with my mentor, or if my mentor are available, I would continue to discuss my work with my mentor.
47. ____Overall, my mentoring experience was effective.

48. Is there any other information about your mentoring experience that you would like to share? If so, please add that information here.

Appendix C

Mentoring Functions Scale (developed by Dr. Raymond Noe)

Using the Likert scale below, please mark the response (1 – 5) that best describes your mentoring experience in the blanks in front of Items # 1-29. You may also answer "D" for "Don't know."

Likert Scale 1-To a very slight extent 2-Occasionally 3-To a moderate extent 4-Frequently 5-To a very large extent

1. ____ Mentor has shared history of his/her career with you.
2. ____ Mentor has encouraged you to prepare for advancement.
3. ____ Mentor has encouraged me to try new ways of behaving in my job.
4. ____ I try to imitate the work behavior of my mentor.
5. ____ I agree with my mentor's attitudes and values regarding education.
6. ____ I respect and admire my mentor.
7. ____ I will try to be like my mentor when I reach a similar position in my career.
8. ____ My mentor has demonstrated good listening skills in our conversations.
9. ____ My mentor has discussed my questions or concerns regarding feelings of competence, commitment to advancement, relationships with peers and supervisors or work/family conflicts.
10. ____ My mentor has shared personal experiences as an alternative perspective to my problems.
11. ____ My mentor has encouraged me to talk openly about anxiety and fears that detract from my work.
12. ____ My mentor has conveyed empathy for the concerns and feelings that I have discussed with him/her.
13. ____ My mentor has kept feelings and doubts I have shared with him/her in strict confidence.
14. ____ My mentor has conveyed feelings of respect for me as an individual.
15. ____ My mentor reduced unnecessary risks that could threaten the possibility of becoming a school principal or receiving a promotion.
16. ____ Mentor helped you finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete.
17. ____ Mentor helped you meet new colleagues.
18. ____ Mentor gave you assignments that increased written and personal contact with school administrators.
19. ____ Mentor assigned responsibilities to you that have increased your contact with people in the district who may judge your potential for future advancement.

20. ____ Mentor gave you assignments or tasks in your work that prepare you for an administrative position.
21. ____ Mentor gave you assignments that present opportunities to learn new skills.
22. ____ Mentor provided you with support and feedback regarding your performance as an educator.
23. ____ Mentor suggested specific strategies for achieving your career goals.
24. ____ Mentor shared ideas with you.
25. ____ Mentor suggested specific strategies for accomplishing work objectives.
26. ____ Mentor gave you feedback regarding your performance in your present job.
27. ____ My mentor has invited me to join him/her for lunch.
28. ____ My mentor has asked me for suggestions concerning problems she/he has encountered at school.
29. ____ My mentor has interacted with me socially outside of work.

Developed by Dr. Raymond Noe (1988); used with permission (see Email on next page)

Noe Permission (Email)

From: Noe, Raymond <noe_22@fisher.osu.edu>
To: zwilliams101@aol.com <zwilliams101@aol.com>
Sent: Mon, May 10, 2010 12:23 pm
Subject: RE: Mentoring Functions Survey
Zella:

You have my permission to reproduce the Mentoring Functions Scale in your paper.

Good luck with your dissertation research.

Ray

Raymond A. Noe
Robert and Anne Hoyt Designated Professor of Management
Fisher College of Business
The Ohio State University
700 Fisher Hall
2100 Neil Avenue
Columbus, OH 43210
614.292.3982

From: zwilliams101@aol.com [mailto:zwilliams101@aol.com]
Sent: Friday, May 07, 2010 4:53 PM
To: Noe, Raymond
Subject: Mentoring Functions Survey

Dear Dr. Noe,

I am a doctoral student at the University of Missouri - St. Louis. I am working on my dissertation on the topic of Mentoring African American female Administrators.

I am writing to ask your permission to reproduce your Mentoring Functions Scale in my paper. I have developed my own survey, but have adapted some of the items from your scale. I wish to show the similarities and differences by including your scale in my paper.

I will appreciate your consideration and response.

Sincerely,

Zella M. Williams

Appendix D

Content Validity Expert Letters

Barbara K. Thompson, Ed.D.

May 1, 2010

Dr. Kathleen Sullivan-Brown
University of Missouri-St. Louis
263 Marillac Hall
St. Louis, MO 63121

Dear Dr. Sullivan-Brown:

I have examined the Mentor Survey that Zella Williams has developed for the research that she will be conducting on mentoring.

It measures all the important aspects of mentoring and appears to be a valid survey. In addition, it will provide the respondents the opportunity to reflect upon and consider the many aspects of their mentoring experiences.

Sincerely,

Barbara K. Thompson

Barbara K. Thompson, Ed.D.
Educational Consultant
Assistant Superintendent, Retired 2006
Hazelwood School District

138 Camfield Square Drive
Saint Louis, MO 63141-8337

BThompson_1@charter.net
Phone: 314-567-7016
Mobile: 314-780-4464

Hazelwood School District
We're on the move!

June 28, 2010

Dr. Kathleen Sullivan-Brown
University of Missouri-St. Louis
263 Marillac Hall
St. Louis, MO 63121

Dear Dr. Sullivan-Brown,

I certify that the dissertation document submitted to the Hazelwood School District by Zella Williams meets all of the requirements of a survey. This document looks like a mentoring survey that measures all of the aspects of mentoring.

Sincerely,

Mary Piper

Mary F. Piper, Ed. D.
Interim Superintendent

15955 New Halls Ferry Road, Florissant, MO 63031
Relay 800-735-2466
www.hazelwoodschools.org

Appendix E

Consent Form

College of Education

One University Blvd.
St. Louis, Missouri 63121-4400
Telephone: 314-516-5483
Fax: 314-516-5942
E-mail: gradeduc@umsl.edu

Informed Consent for Participation in Research Activities

Perceived Effectiveness of Mentoring Experiences of African American Female Educational Administrators

Participant _____ HSC Approval Number 100514W

Principal Investigator Zella Williams PI's Phone Number 314-839-8109

You are invited to participate in a research study conducted by Zella Williams/and Dr. Kathleen Sullivan Brown. The purpose of this research is to investigate the difference between the perceived effectiveness of mentoring experiences of African American female educational administrators who have African American female mentors and those who have Caucasian female mentors.

1. Your participation will involve completing a survey about your mentoring experience(s).

    a. If you attend regularly scheduled meetings with your peers, you will bring your laptop to a scheduled meeting, which will be held in the regular meeting place.
    b. At that meeting, you will complete an electronic survey of approximately 40 questions about your mentoring experience.
    c. The amount of time involved in your participation will be approximately 30 minutes.
    d. Approximately 130 administrators from your school district may be involved in this research.

2. There are no anticipated risks associated with this research. There may be certain discomforts associated with this research. They include uncomfortable feelings that might come from answering certain questions. You may stop answering questions at any time, or you may choose not to answer specific questions if responding to the questions causes you discomfort.

3. There are no direct benefits for your participating in this study. However, your participation will contribute to the knowledge about mentoring, including cross-race and cross-gender mentoring, and may help to advance more effective mentoring and teaching.

4. Your participation is voluntary, and you may choose not to participate in this research study or to withdraw your consent at any time. You may choose not to answer any questions that you do not want to answer. You will NOT be penalized in any way should you choose not to participate or to withdraw.

5. By agreeing to participate, you understand and agree that your data may be shared with other researchers and educators in the form of presentations and/or publications. In all cases, your identity will not be revealed. In rare instances, a researcher's study must undergo an audit or program evaluation by an oversight agency (such as the Office for Human Research Protection). That agency would be required to maintain the confidentiality of your data. In addition, all data will be stored on a password-protected computer and/or in a locked office.

6. If you have any questions or concerns regarding this study, or if any problems arise, you may call the Investigator, Zella Williams, 314-839-8109, or the Faculty Advisor, Dr. Kathleen Sullivan Brown, 314-516-5788. You may also ask questions or state concerns regarding your rights as a research participant to the Office of Research Administration, at 314-516-5897.

I have read this consent form and have been given the opportunity to ask questions. I will also be given a copy of this consent form for my records. I consent to my participation in the research described above.

Participant's Signature	Date	Participant's Printed Name	
Signature of Investigator or Designee	Date	Investigator/Designee Printed Name	

Appendix F

Coding Key

Mentor Survey

1. My race (check √ one):

   _1__ African American **__0_**Caucasian **_0__**Hispanic **__0_** Asian American **__0_** Native American **_0__**Other

2. Race of my primary (main) mentor (check √ one):

   _1__ African American **__0_**Caucasian **_0__**Hispanic **__0_** Asian American **__0_** Native American **_0__**Other

3. My gender (check √ one): **_1__**Female **_0__**Male

4. Gender of my mentor (check √ one): **_1__**Female **_0__**Male

5. My age (check √ one): **_1__**25-35 **__2_** 36-45 **__3_** 46-55 **__4_**56-65 **_5__**66+

6. Age of my mentor (check √ one): **_1__**25-35 **_2__** 36-45 **__3_** 46-55 **_4_**56-65 **__5_**66+ **__6_**Don't Know

7. My teacher certification status (check √ one): **_1__** Certified **_2__** Non-certified

8. Type of mentoring program (check √ one):

   _1_ Informal/spontaneous, established by two individuals
   _2__ Formal relationship, established by the district or another organization
   _3__ Hybrid relationship, combining spontaneous and formal relationship

9. Length of mentoring relationship: ___# of months ___# of years ___other (please explain)_____**scale: number of months, years converted to multiples of 12 months**

   _____

10. Frequency of mentoring contacts (check √ one):
_1__ Daily **_2__**Several times a week **__3_**Weekly **_4__**Several times a month **__5_**Monthly **_6__**Infrequently

11. Most frequent method of communication with my mentor (check √ one):
_1__ Face-to-face **_2__** Telephone **_3__** Texting **__4_** Email

12. Are you still in the mentoring relationship? (check √ one) **__1_**Yes **_0__**No

13. If not, how long ago did the mentoring relationship end?
__1_ 1-6 months **_2___**7-12 months **_3___** 1-2 years **__4__** 2-5 years __5__ 5+ years

14. If you are still in contact with your mentor, indicate how frequently. (check √ one)
_1__ Daily **_2__**Several times a week **_3__**Weekly **__4_**Several times a month **_5__**Monthly **_6_**Infrequently

Using the Likert scale below, please mark the response (1 – 5) that best describes your mentoring experience in the blanks in front of Items # 15-47.

Likert Scale **1**-Strongly disagree **2**-Disagree **3**-Neither agree nor disagree **4**-Agree **5**-Strongly agree

Each of the Items 15-47 were coded with the respondent's scoring of the statement.

48. Is there any other information about your mentoring experience that you would like to share? If so, please add that information here.

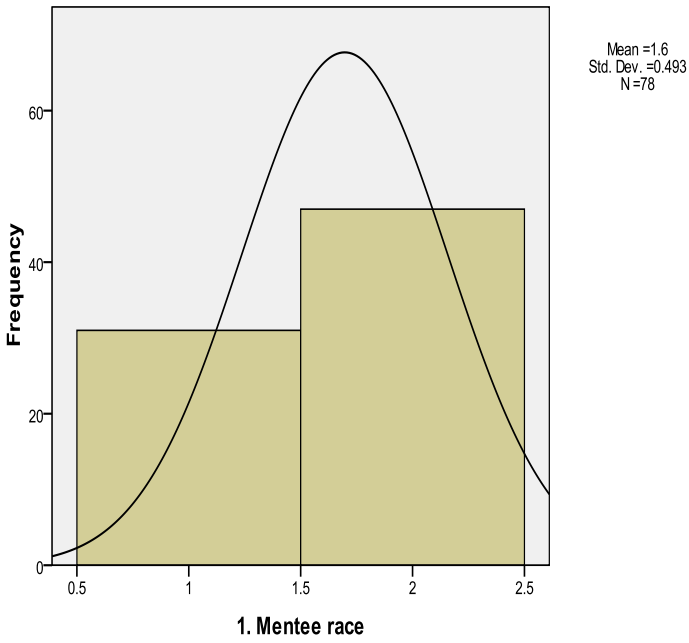
Appendix G

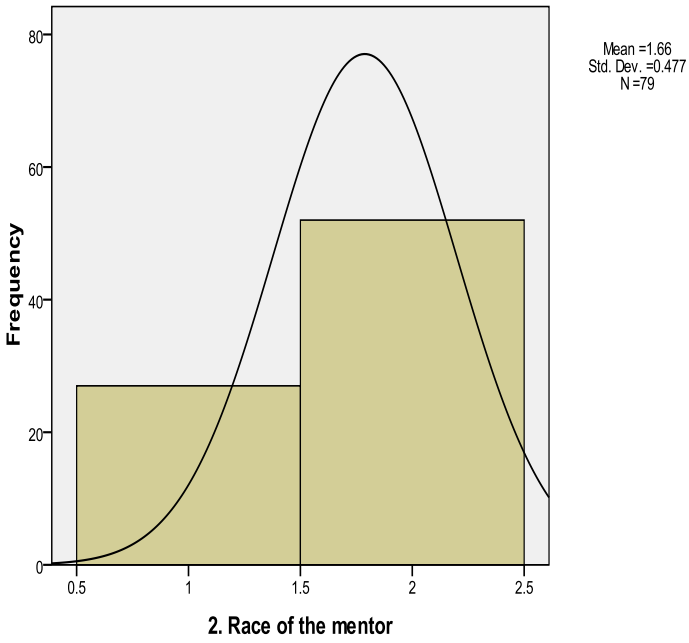
Histograms

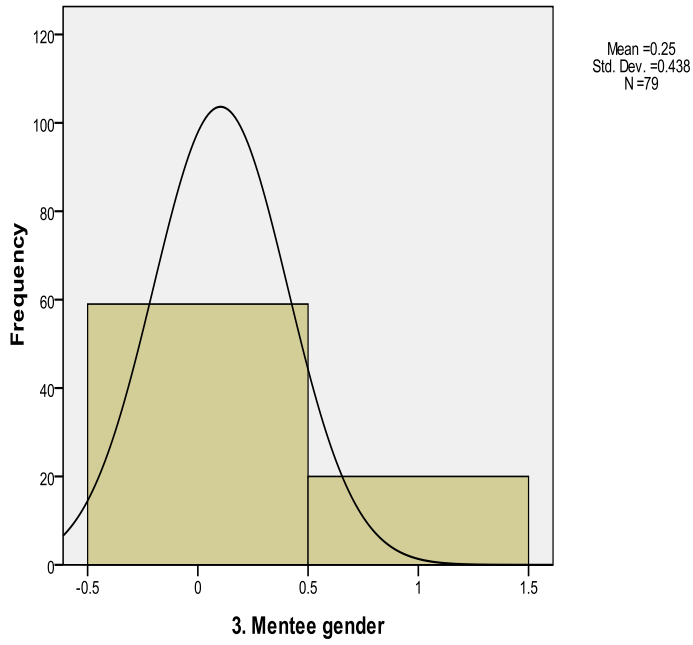
And

Tables

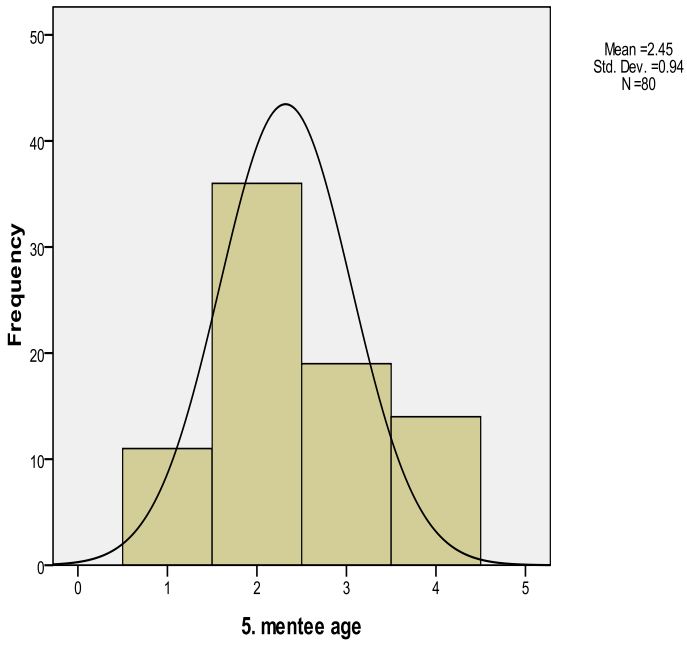
Histograms

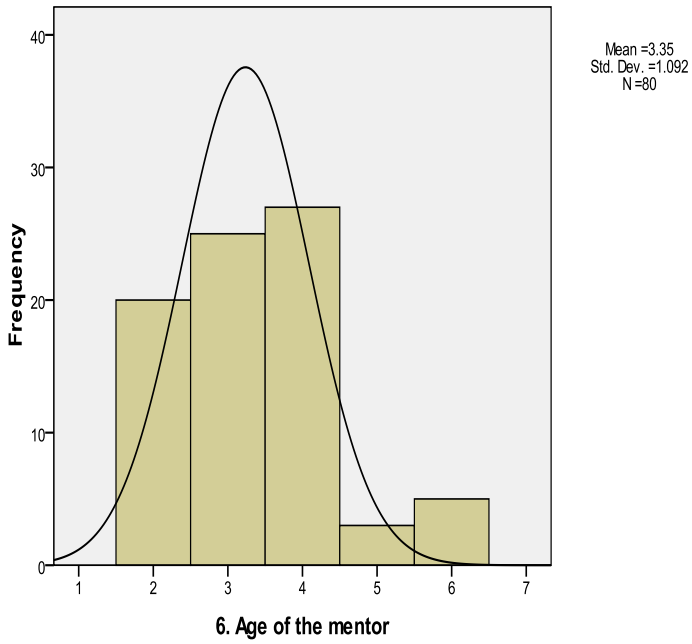

Mean =1.6
Std. Dev. =0.493
N =78
Frequency
1. Mentee race

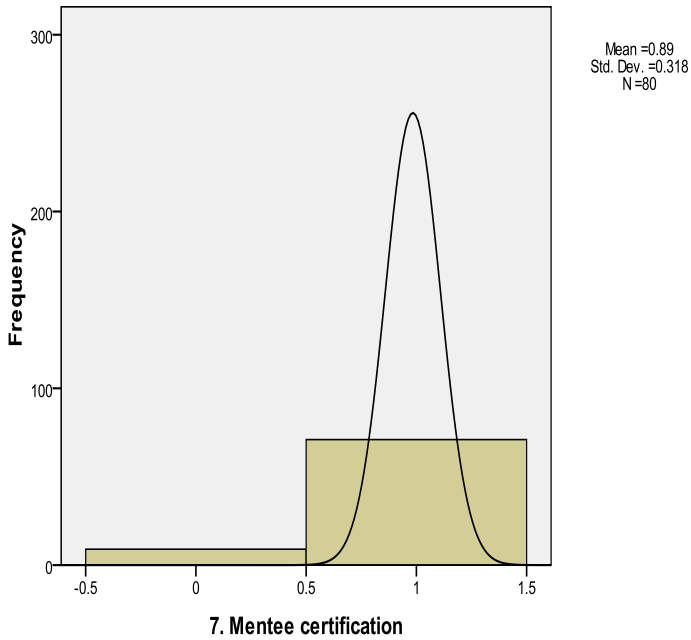

Mean =1.66
Std. Dev. =0.477
N =79
Frequency
2. Race of the mentor

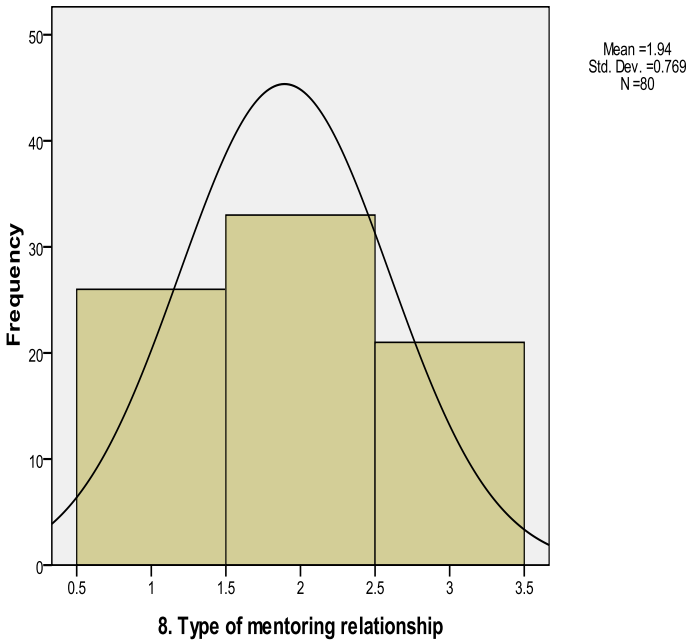

Mean =0.25
Std. Dev. =0.438
N =79
Frequency
3. Mentee gender

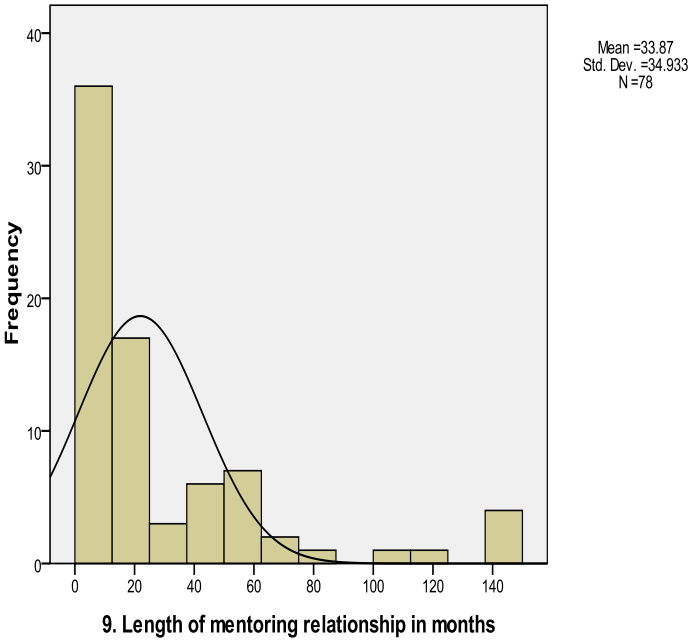

Mean =0.28
Std. Dev. =0.453
N =78
Frequency
4. Gender of the mentor

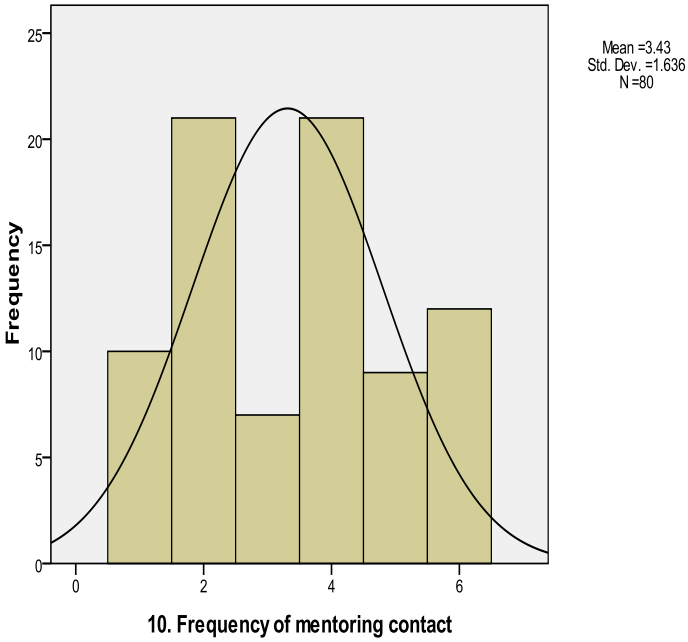

Mean =2.45
Std. Dev. =0.94
N =80
Frequency
5. mentee age

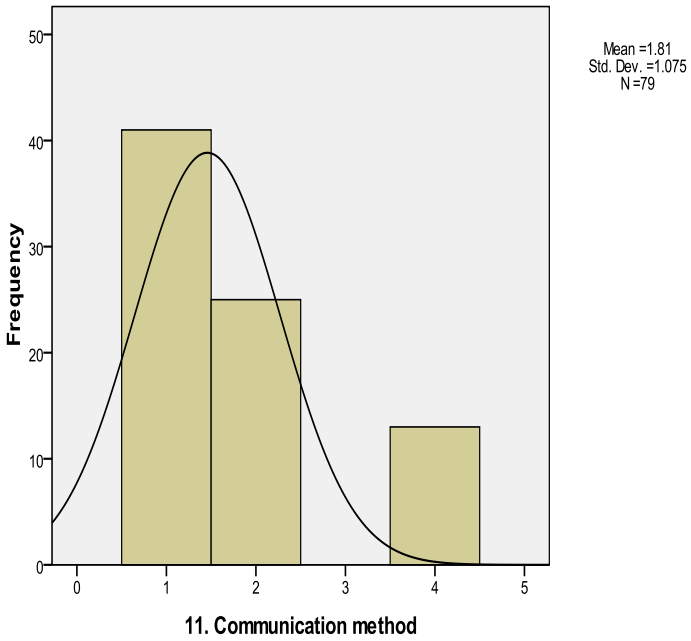

Mean =3.35
Std. Dev. =1.092
N =80
Frequency
6. Age of the mentor

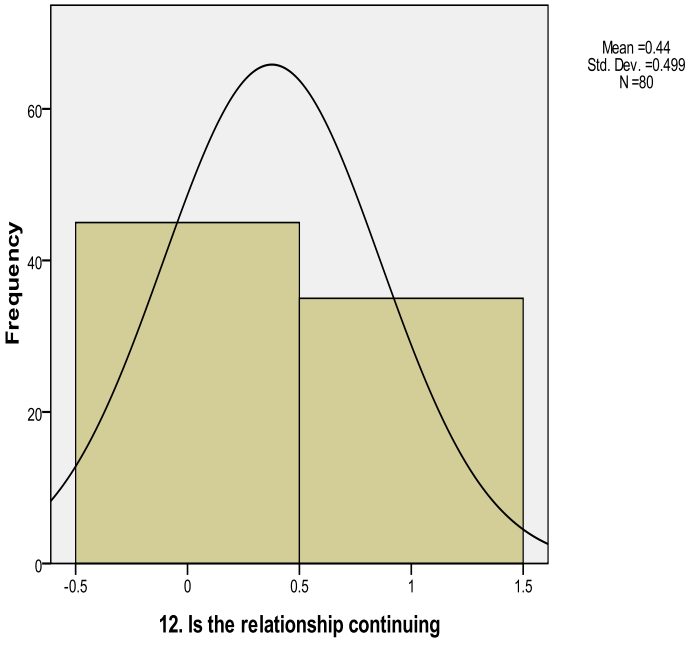

Mean =0.89
Std. Dev. =0.318
N =80
Frequency
7. Mentee certification

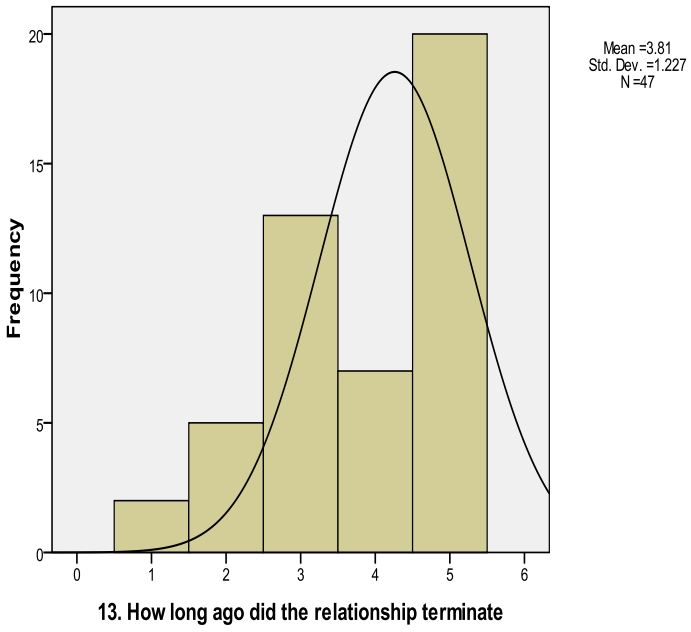

Mean =1.94
Std. Dev. =0.769
N =80
Frequency
8. Type of mentoring relationship

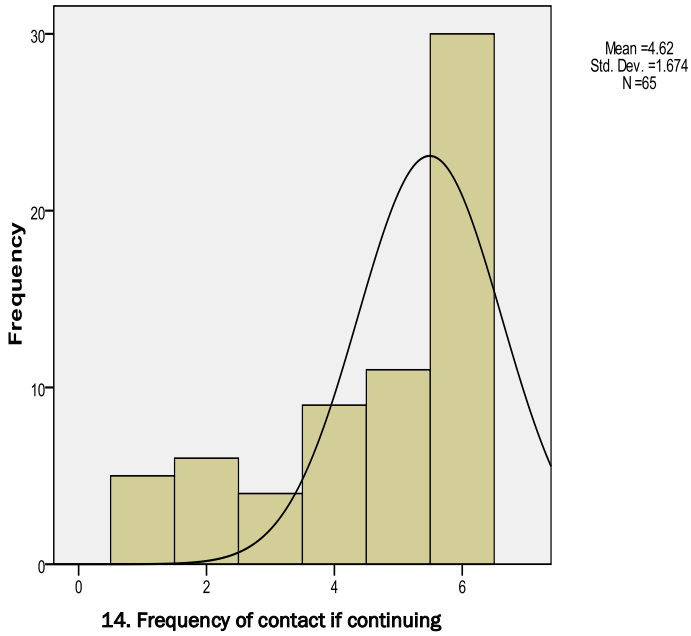

Mean =33.87
Std. Dev. =34.933
N =78
Frequency
0
10
20
30
40
0
20
40
60
80
100
120
140
9. Length of mentoring relationship in months

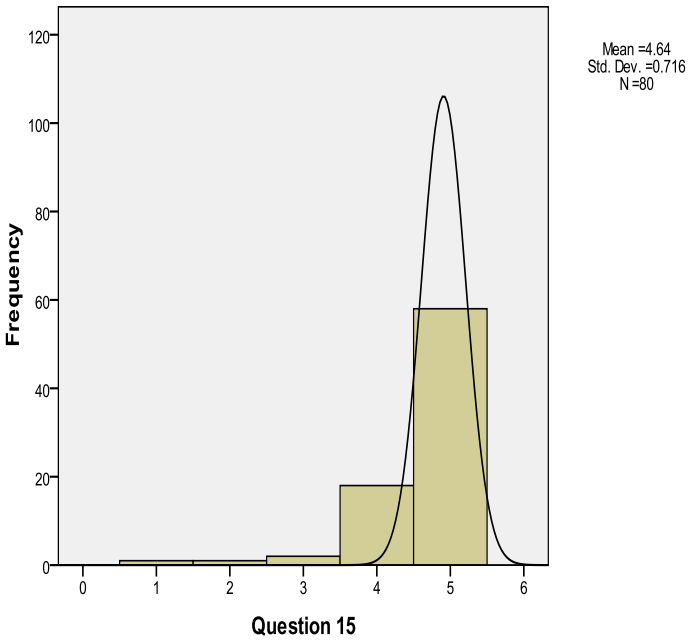

Mean =3.43
Std. Dev. =1.636
N =80
Frequency
0
5
10
15
20
25
0
2
4
6
10. Frequency of mentoring contact

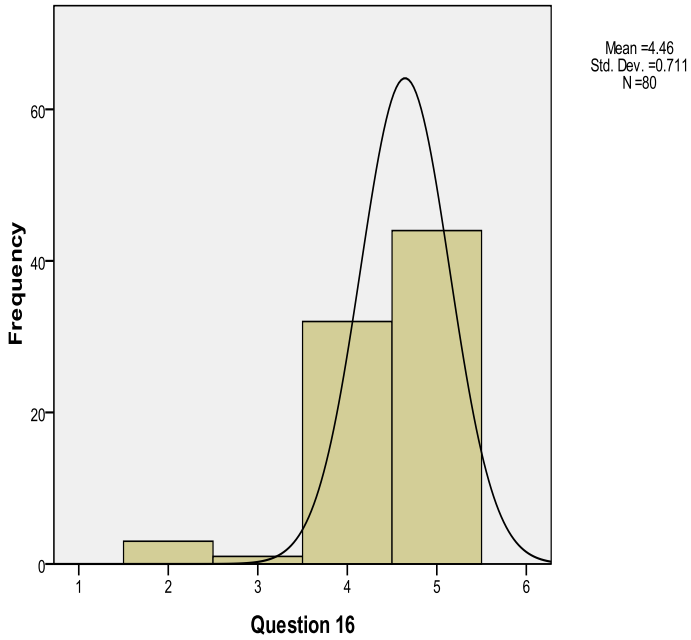

Mean =1.81
Std. Dev. =1.075
N =79
Frequency
0
10
20
30
40
50
0
1
2
3
4
5
11. Communication method

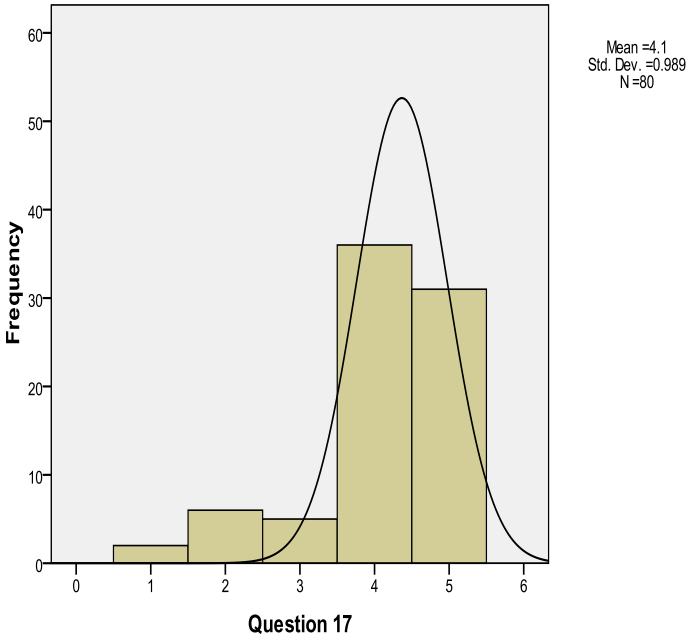

Mean =0.44
Std. Dev. =0.499
N =80
Frequency
0
20
40
60
-0.5
0
0.5
1
1.5
12. Is the relationship continuing

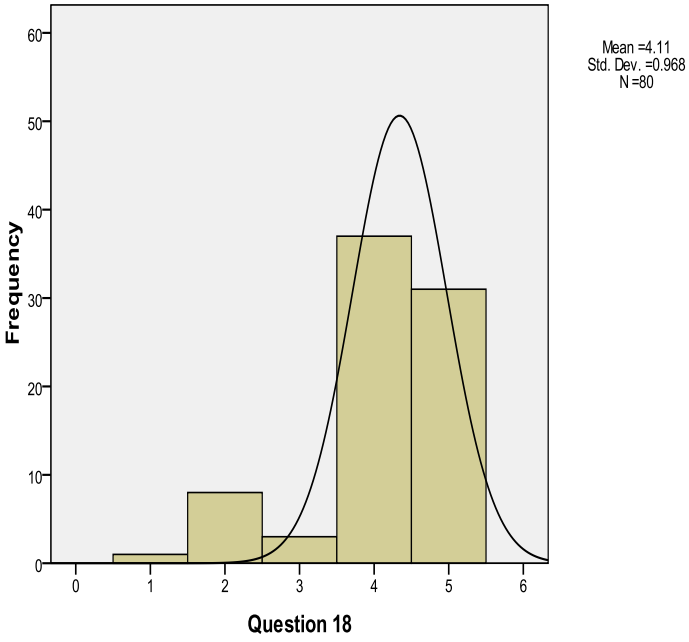

Mean =3.81
Std. Dev. =1.227
N =47
Frequency
13. How long ago did the relationship terminate

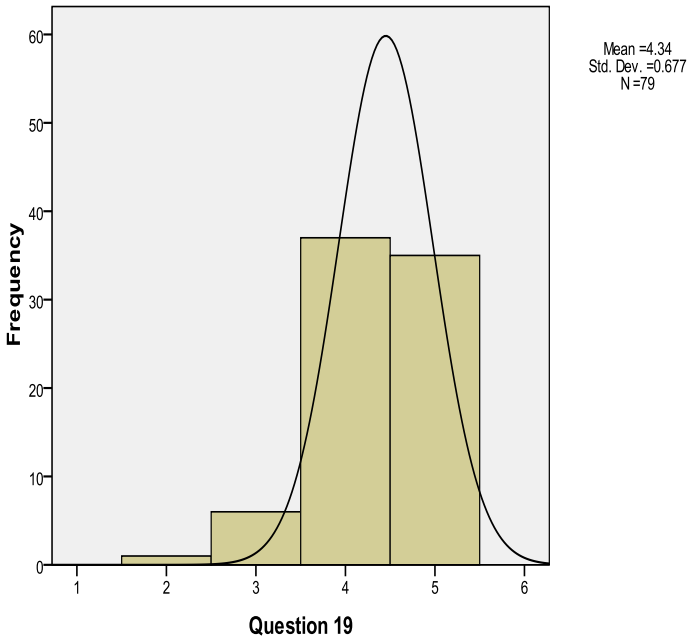

Mean =4.62
Std. Dev. =1.674
N =65
Frequency
14. Frequency of contact if continuing

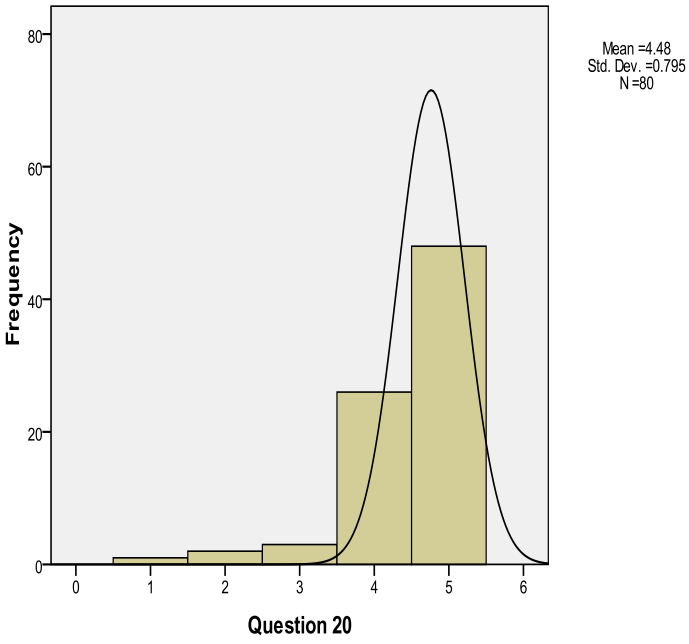

Mean =4.64
Std. Dev. =0.716
N =80
Frequency
Question 15

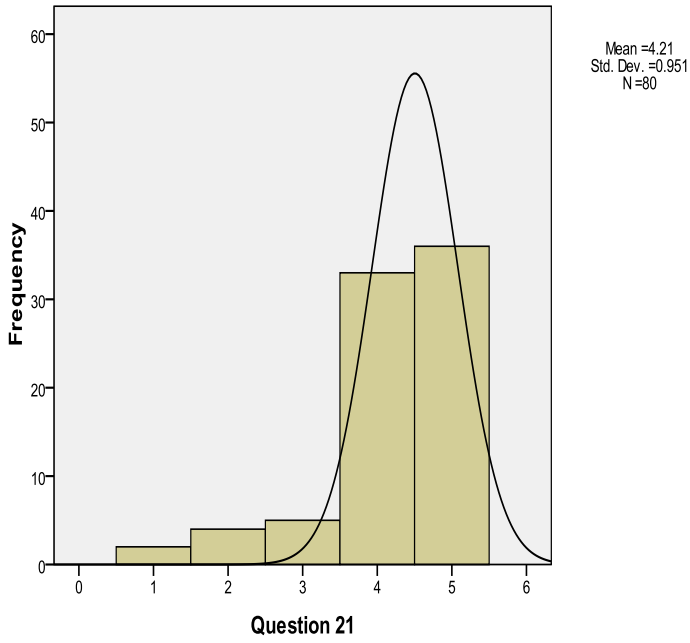

Mean =4.46
Std. Dev. =0.711
N =80
Frequency
Question 16

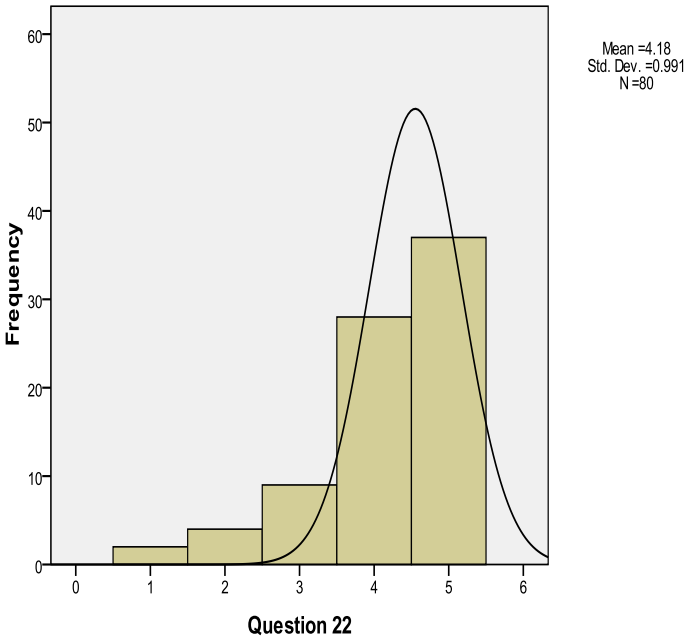

Mean =4.1
Std. Dev. =0.989
N =80
Frequency
Question 17

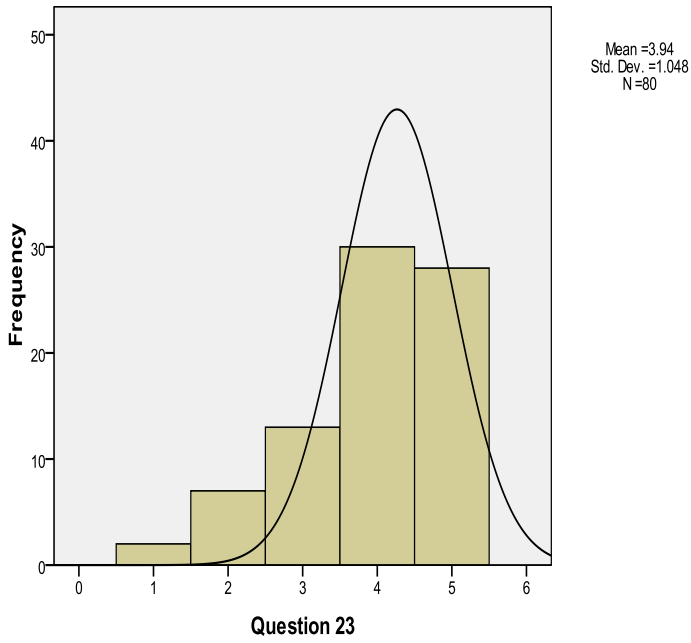

Mean =4.11
Std. Dev. =0.968
N =80
Frequency
Question 18

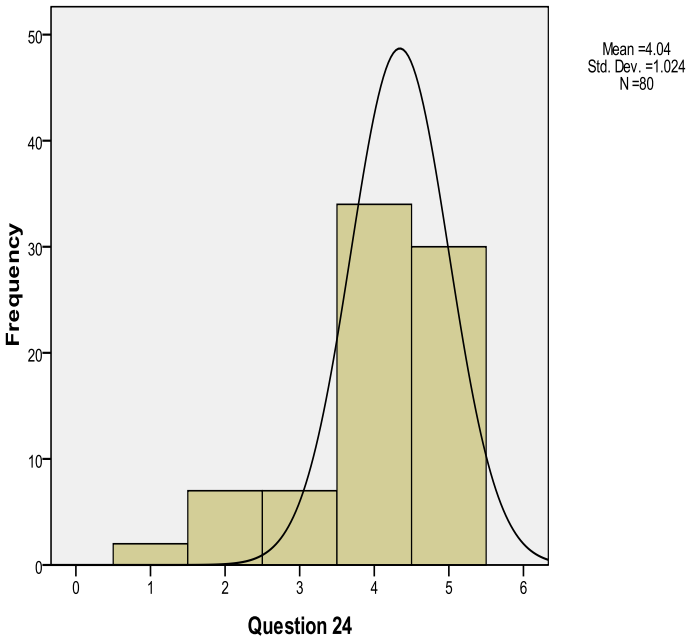

Mean =4.34
Std. Dev. =0.677
N =79
Frequency
Question 19

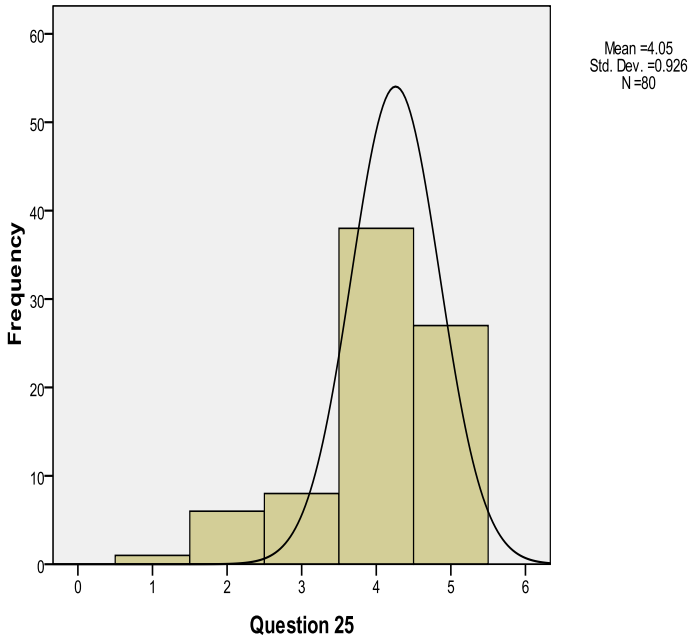

Mean =4.48
Std. Dev. =0.795
N =80
Frequency
Question 20

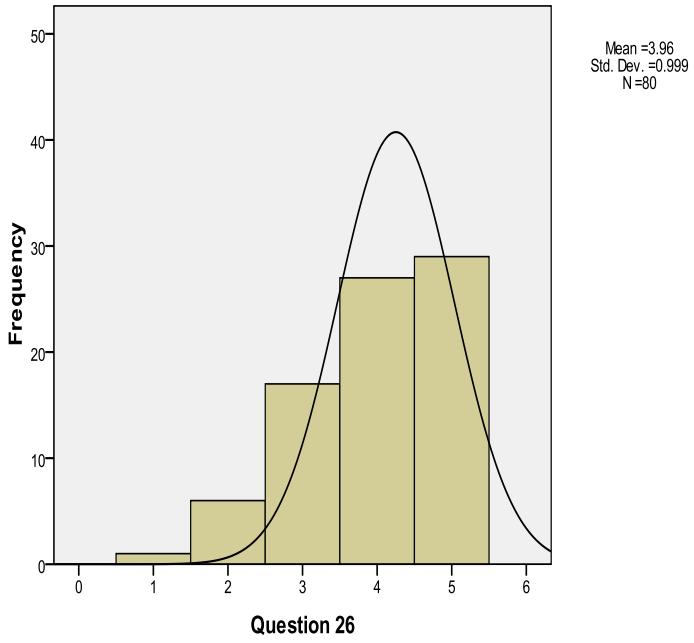

Mean =4.21
Std. Dev. =0.951
N =80
Frequency
Question 21

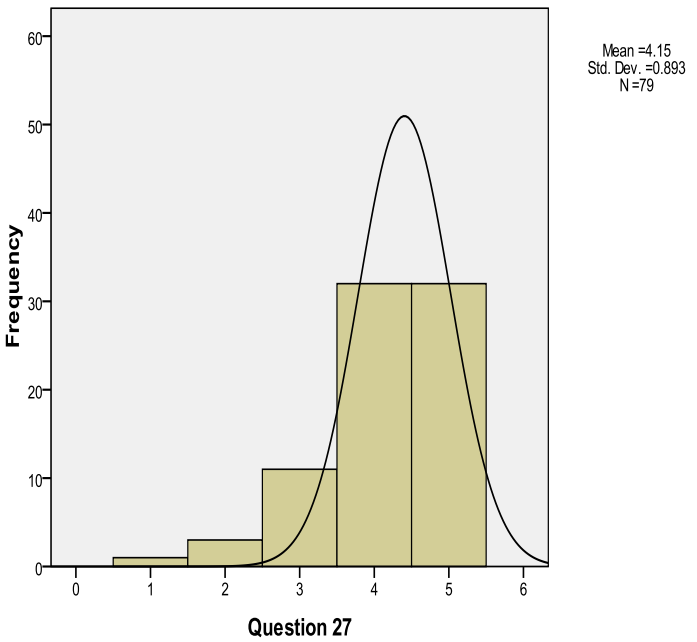

Mean =4.18
Std. Dev. =0.991
N =80
Frequency
Question 22

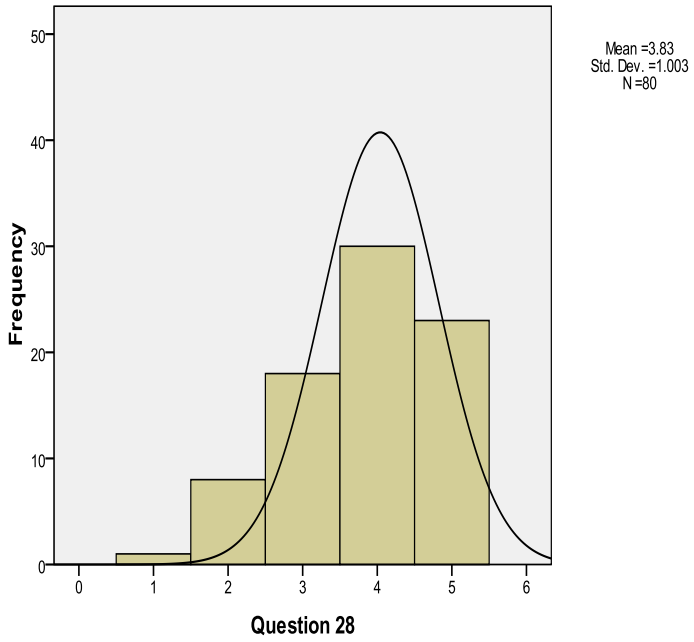

Mean =3.94
Std. Dev. =1.048
N =80
Frequency
Question 23

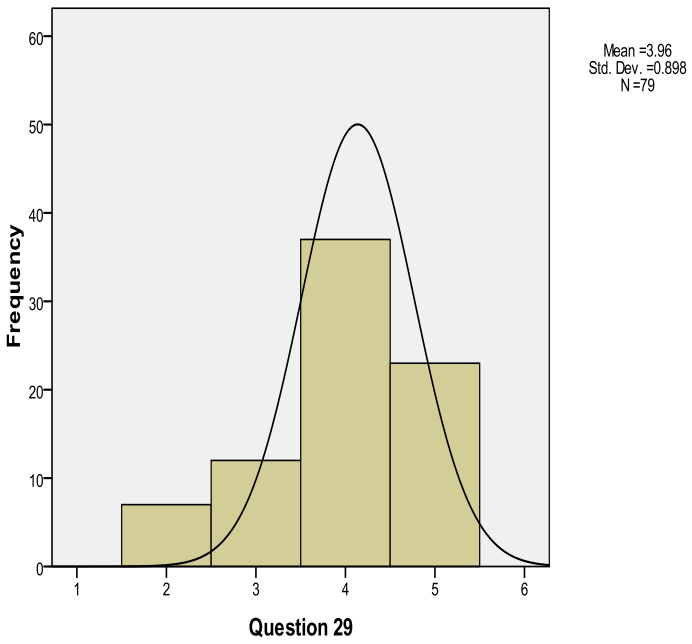

Mean =4.04
Std. Dev. =1.024
N =80
Frequency
Question 24

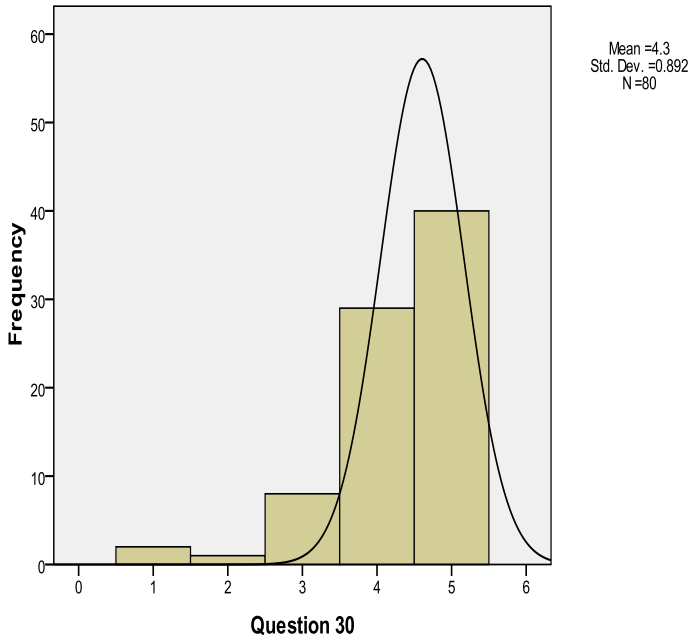

Mean =4.05
Std. Dev. =0.926
N =80
Frequency
Question 25

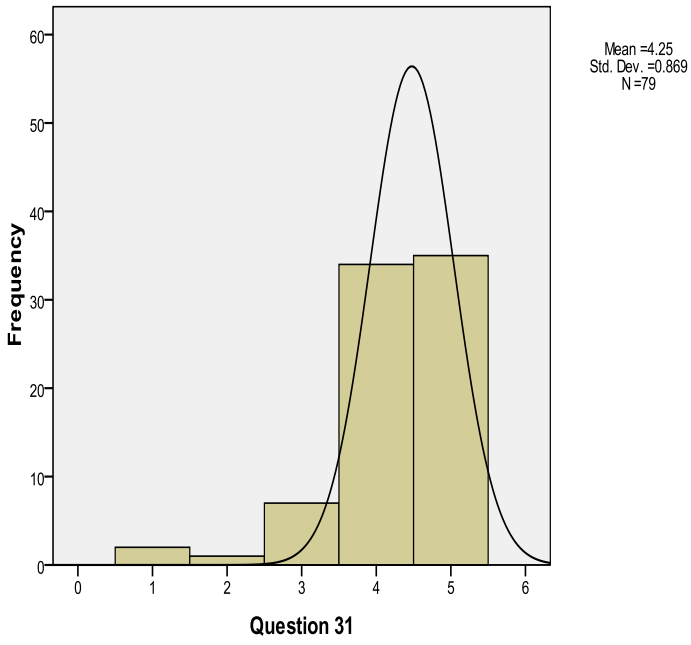

Mean =3.96
Std. Dev. =0.999
N =80
Frequency
Question 26

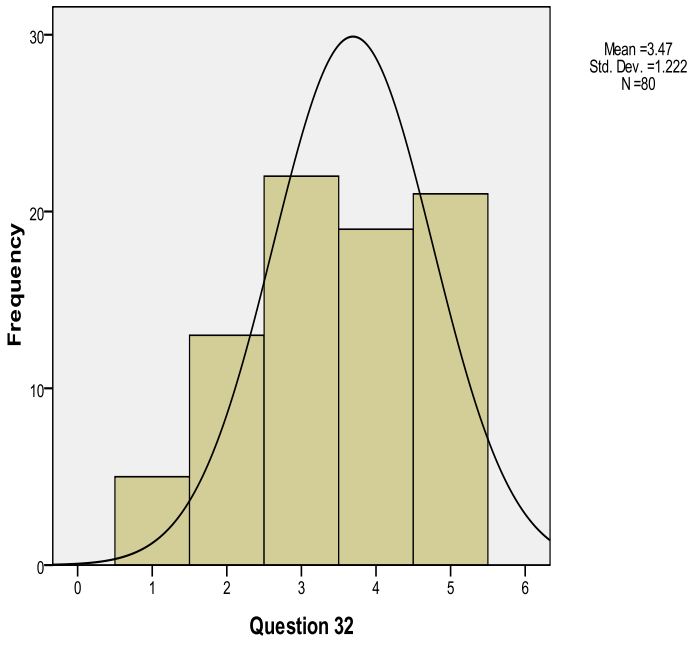

Mean =4.15
Std. Dev. =0.893
N =79
Frequency
Question 27

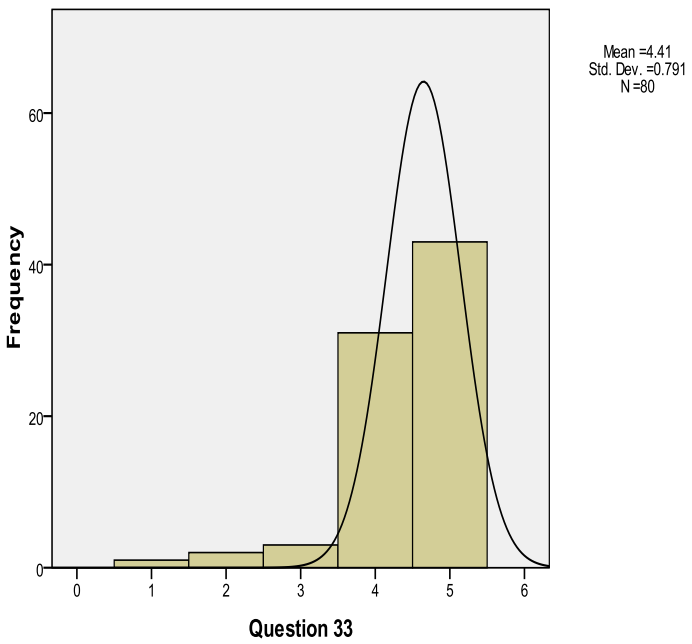

Mean =3.83
Std. Dev. =1.003
N =80
Frequency
Question 28

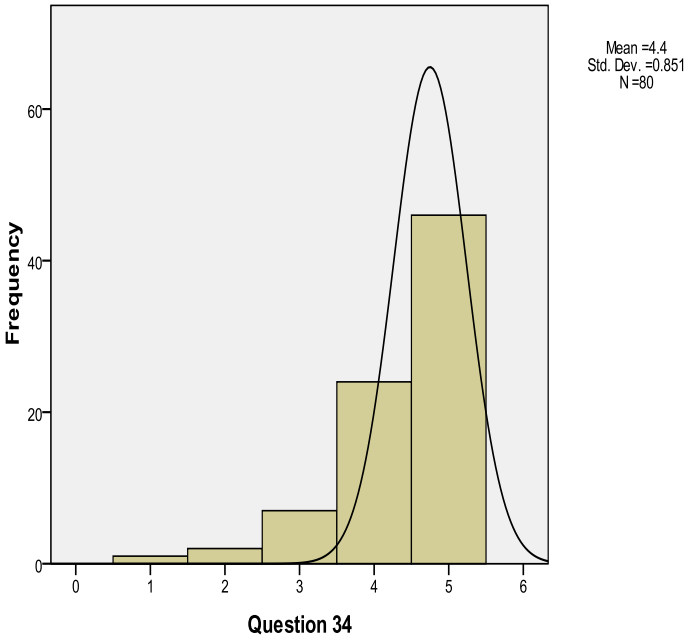

Mean =3.96
Std. Dev. =0.898
N =79
Frequency
Question 29

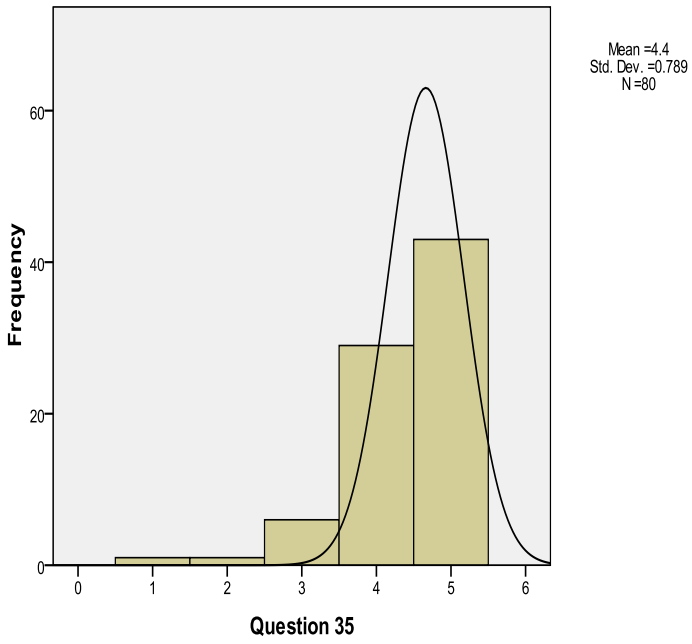

Mean =4.3
Std. Dev. =0.892
N =80
Frequency
Question 30

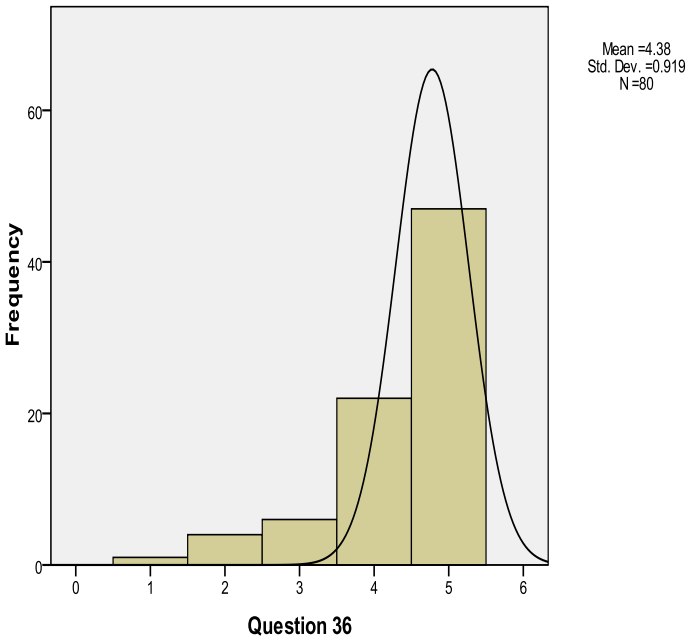

Mean =4.25
Std. Dev. =0.869
N =79
Frequency
Question 31

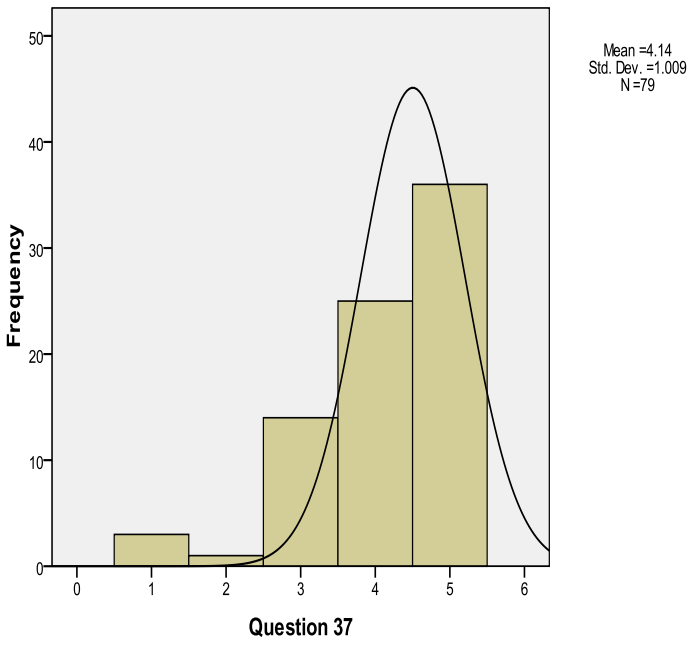

Mean =3.47
Std. Dev. =1.222
N =80
Frequency
Question 32

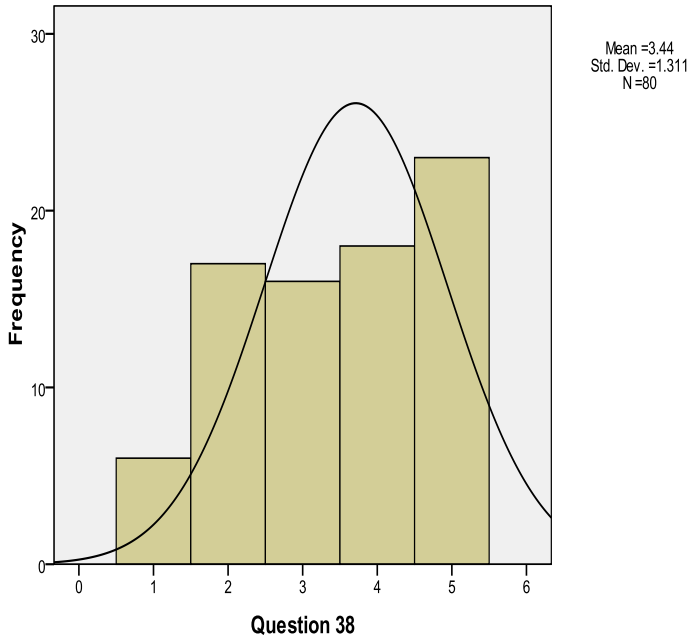

Mean =4.41
Std. Dev. =0.791
N =80
Frequency
Question 33

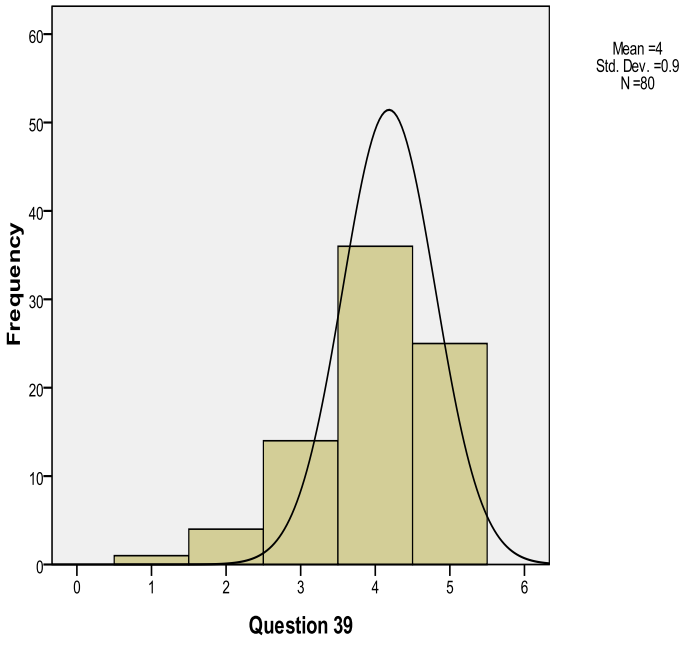

Mean =4.4
Std. Dev. =0.851
N =80
Frequency
Question 34

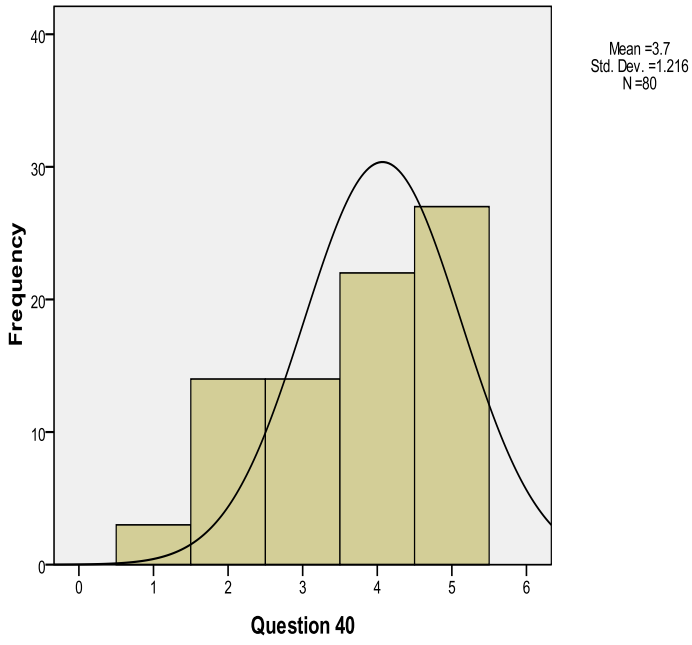

Mean =4.4
Std. Dev. =0.789
N =80
Frequency
Question 35

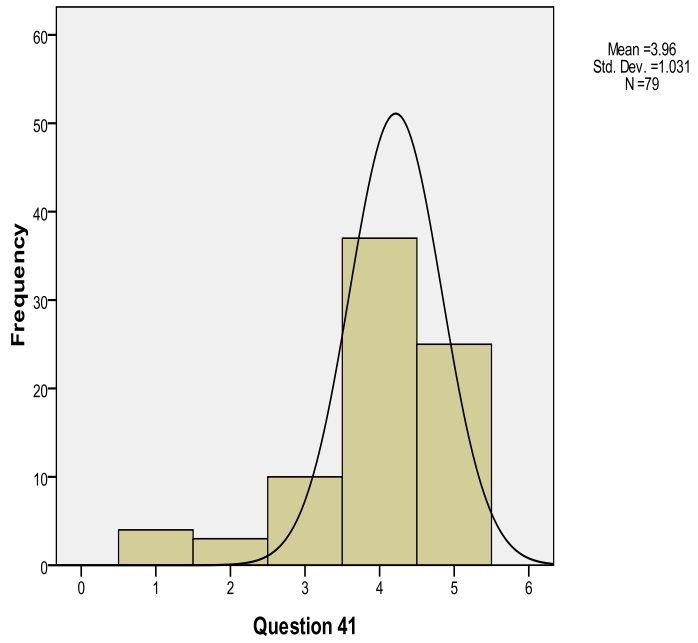

Mean =4.38
Std. Dev. =0.919
N =80
Frequency
Question 36

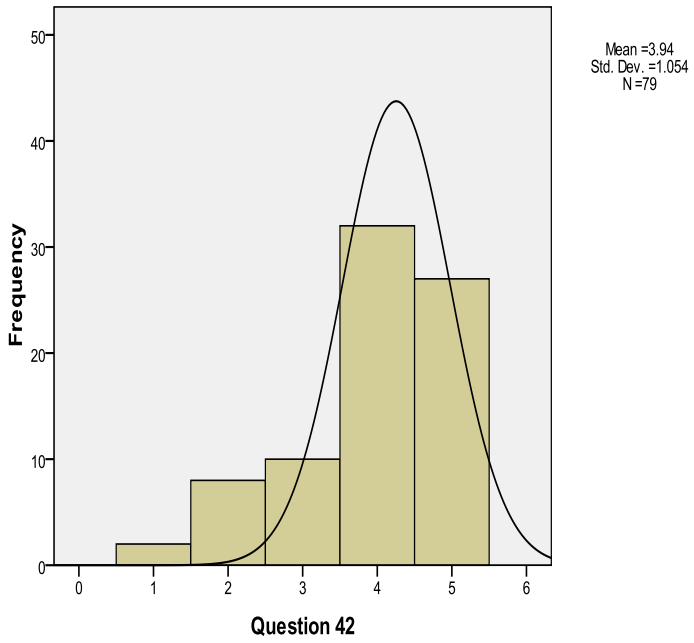

Mean =4.14
Std. Dev. =1.009
N =79
Frequency
Question 37

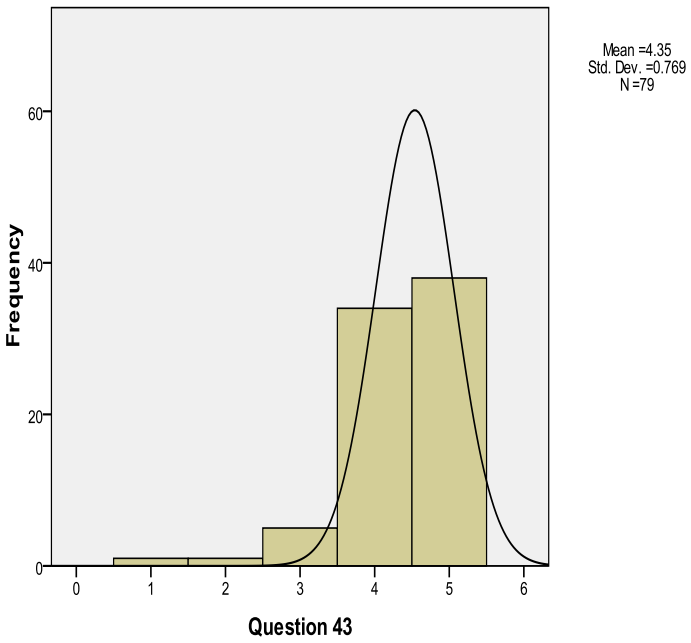

Mean =3.44
Std. Dev. =1.311
N =80
Frequency
Question 38

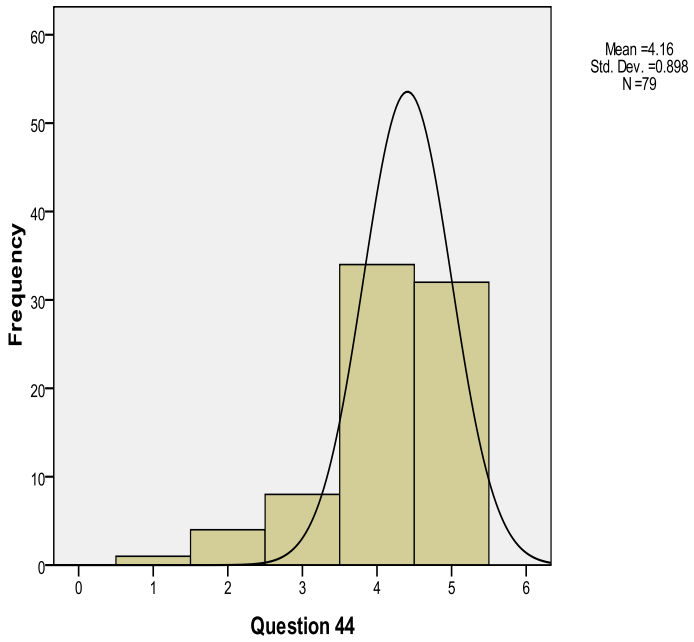

Mean =4
Std. Dev. =0.9
N =80
Frequency
Question 39

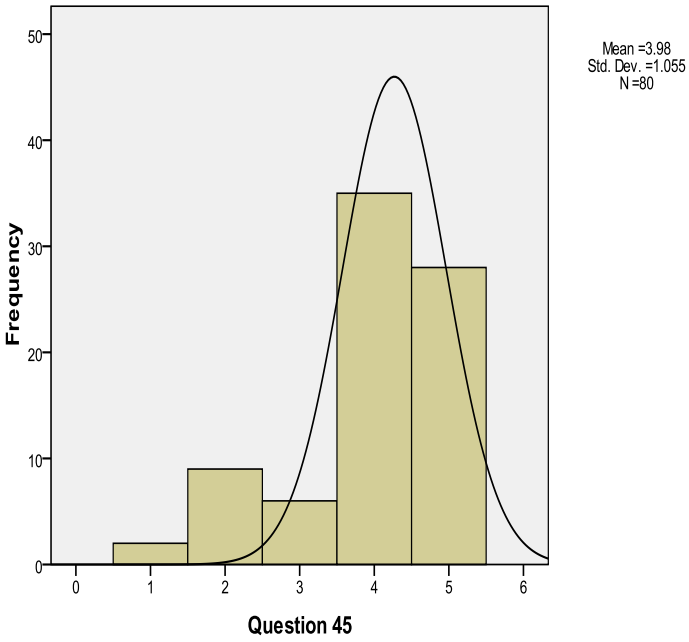

Mean =3.7
Std. Dev. =1.216
N =80
Frequency
Question 40

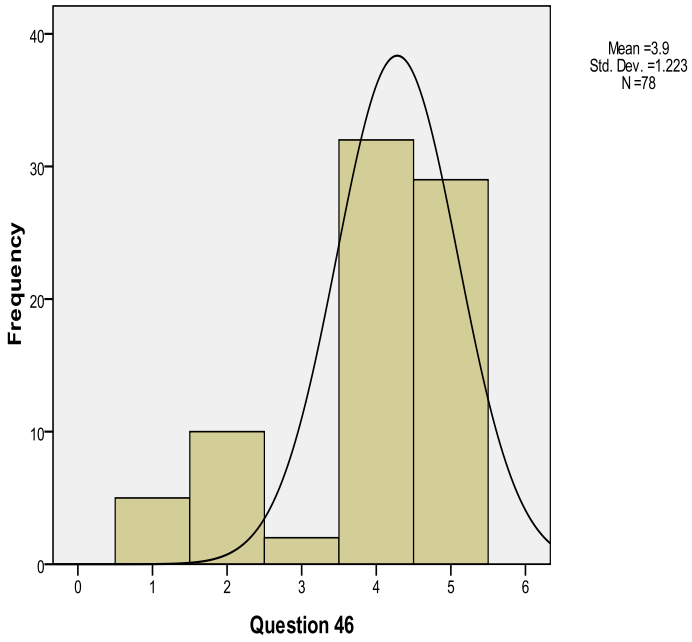

Mean =3.96
Std. Dev. =1.031
N =79
Frequency
Question 41

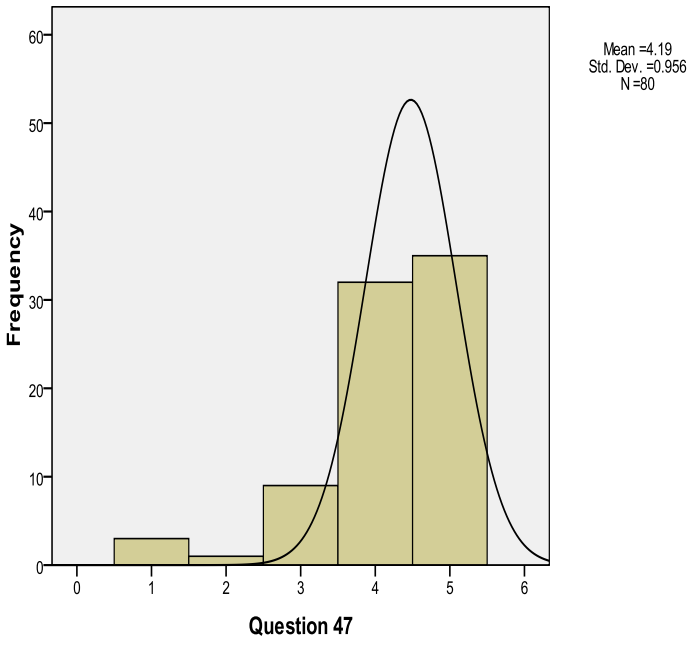

Mean =3.94
Std. Dev. =1.054
N =79
Frequency
Question 42


Mean =4.35
Std. Dev. =0.769
N =79
Frequency
Question 43


Mean =4.16
Std. Dev. =0.898
N =79
Frequency
Question 44


Mean =3.98
Std. Dev. =1.055
N =80
Frequency
Question 45


Mean =3.9
Std. Dev. =1.223
N =78
Frequency
Question 46


Mean =4.19
Std. Dev. =0.956
N =80
Frequency
Question 47

Tables

Table I:
Respondents' Demographic Characteristics

	Male	Female	Total
African American	6	28***	34
Caucasian	14	32	46
Sub-total	20	60	80
Race not identified			2**
Gender not identified			1**
Total respondents			83
Unusable surveys due to responses			(3)*
Total N for Exploratory Data Analysis			80
Race not identified, not used in statistical analysis			(2)**
Gender not identified, not used in statistical analysis			(1)**
TOTAL N for Statistical Analysis			77

*Three returns were unusable for the reasons explained in the paragraphs above.
**Usable for exploratory data analysis; unusable for statistical data analysis
***Four of the 28 African American female respondents provided incomplete answers, yielding a population of 24 African American female administrators for comparison purposes in Hypothesis 3.

Table II
Case Processing Summary for Cronbach's Coefficient Alpha for Questionnaire Items 15-47

		N	%
Cases	Valid	71	88.8
	Excluded*	9	11.3
	Total	80	100.0

*Listwise deletion based on all variables in the procedure

Table III
Reliability Statistics for Cronbach's Coefficient Alpha for Questionnaire Items 15-47

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.974	.976	33

Table IV
T-Values and Their Probability for Comparison of Means Based On Gender for Questionnaire Items 15-47

Item Number	t_{calc}	p-value	Item Number	t_{calc}	p-value
15	.122	.903	32	1.190	.238
16	.228	.820	33	.534	.595
17	-.007	.995	34	.876	.384
18	.191	.849	35	.945	.347
19	-.129	.897	36	1.238	.220
20	1.097	.276	37	.554	.581
21	.187	.852	38	1.260	.211
22	.376	.708	39	-1.035	.304
23	.554	.581	40	.121	.904
24	.627	.532	41	2.249	.027
25	1.108	.271	42	-.174	.862
26	.708	.481	43	-.394	.695
27	1.431	.157	44	.190	.850
28	1.430	.157	45	.608	.545
29	1.083	.282	46	.422	.675
30	1.731	.087	47	.860	.392
31	1.151	.253			

Table V
T-Values and Their Probability for Comparison of Means Based On Race for Questionnaire Items 15-47

Item Number	t_{calc}	p-value	Item Number	t_{calc}	p-value
15	.749	.456	32	.990	.325
16	-.223	.824	33	-1.367	.176
17	.181	.857	34	-.447	.656
18	.042	.966	35	-1.856	.067
19	-1.156	.251	36	-.435	.664
20	-.364	.717	37	-.429	.669
21	-.116	.908	38	-1.097	.276
22	.089	.930	39	1.443	.153
23	.186	.853	40	-1.126	.264
24	-.477	.635	41	2.301	.024
25	-.102	.919	42	-.734	.465
26	.186	.853	43	-2.641	.010
27	1.001	.320	44	-1.762	.082
28	.428	.670	45	-.885	.379
29	.592	.556	46	-1.042	.301
30	.094	.925	47	-.063	.950
31	.542	.589			

Table VI
Hypothesis One: Levene's Test of Equality of Error Variances
Dependent Variable: Item 47

F	df1	df2	Sig.
.344	1	75	.559

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Table VII
Hypothesis One: Analysis of Covariance Tests of Between-Subjects Effects
Dependent Variable: Question 47

Source	Type lll Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.245	2	.623	.768	.468
Intercept	737.728	1	737.728	909.844	.000
Cross_race	.794	1	.794	.979	.326
Gender	.447	1	.447	.552	.460
Error	60.001	74	.811		
Total	1433.000	77			
Corrected Total	61.247	76			

Table VIII
Hypothesis Two: Levene's Test of Equality of Error Variances
Dependent Variable: Item 47

F	df1	df2	Sig.
2.085	1	73	.153

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Table IX
Hypothesis Two: Analysis of Covariance Tests of Between-Subjects Effects
Dependent Variable: Question 47

Source	Type lll Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.901	2	1.450	2.209	.117
Intercept	825.922	1	825.922	1257.595	.000
Cross_gender	2.581	1	2.581	3.930	.051
Myrace1	.480	1	.480	.730	.396
Error	47.286	72	.657		
Total	1407.000	75			
Corrected Total	80.187	74			

Table X
Hypothesis Three: Box's Test of Equality of Covariance Matrices

Box's M	30.399
F	4.801
df1	6
Df2	14797.693
Sig.	.000

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

Table XI
Hypothesis Three: Multivariate Tests

Effect		Value	F	Hypothesis df	Error Df	Sig.
Intercept	Pillai's Trace	.978	1072.702	3.000	74.000	.000
	Wilks' Lambda	.022	1072.702	3.000	74.000	.000
	Hotelling's Trace	43.488	1072.702	3.000	74.000	.000
	Roy's Largest Root	43.488	1072.702	3.000	74.000	.000
F AA	Pillai's Trace	.033	.851	3.000	74.000	.471
	Wilks' Lambda	.967	.851	3.000	74.000	.471
	Hotelling's Trace	.034	.851	3.000	74.000	.471
	Roy's Largest Root	.034	.851	3.000	74.00	.471

Table XII
Hypothesis Three: Multivariate Analysis of Variance Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Question 15	.659	1	.659	1.354	.248
	Question 30	1.105	1	1.105	1.673	.200
	Question 47	.353	1	.353	.440	.509
Intercept	Question 15	1449.377	1	1449.377	2977.524	.000
	Question 30	1249.105	1	1249.105	1890.025	.000
	Question 47	1194.097	1	1194.097	1489.146	.000
FAA	Question 15	.659	1	.659	1.354	
	Question 30	.1.105	1	.1.105	1.673	
	Question 47	.353	1	.353	.440	
Error	Question 15	36.995	76	.487		
	Question 30	50.228	76	.661		
	Question 47	60.942	76	.802		
Total	Question 15	1727.000				
	Question 30	1516.000	78			
	Question 47	1449.000	78			
Corrected Total	Question 15	37.654	77			
	Question 30	51.333	77			
	Question 47	61.295	77			

References

Allen, K., Jacobson, S., & Lomotey, K. (1995). African American women in education administration: The importance of mentors and sponsors. *The Journal of Negro Education*, *64*, 409-422.

Allen, T., Eby, L., & Lentz, E. (2006). The relationship between formal mentoring program characteristics and perceived program effectiveness. *Personnel Psychology, 59,* 125-153.

Allen, T., Eby, L., O'Brien, K., & Lentz, E. (2007). The state of mentoring research: A qualitative review of current research methods and future research implications. *Journal of Vocational Behavior, 73,* 343-357.

Allen, T., Eby, L., Poteet, M., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of Applied Psychology, 89*(1), 127-136.

Alsbury, T., & Hackmann, D. (2006, January). Learning from experience: Initial findings of a mentoring/induction program for novice principals and superintendents. *Planning and Changing*, *37*(3/4), 169-189.

Alston, J. A. (1999). Climbing hills and mountains: Black females making it to the superintendency. In C. Brunner (Ed.), *Sacred dreams: Women and the superintendency*. Albany, NY: State University of New York Press.

American Association of Colleges and Universities (2006, October). Teacher induction programs: Trends and opportunities. *Policy Matters, 3*(10).

American Educational Research Association, American Psychological Association,

National Council on Measurement in Education. (1999). *Standards for educational and psychological testing.* Washington, DC: American Educational Research Association.

The American Heritage College Dictionary (3rd ed.). (1993). New York: Houghton Mifflin Company, 89.

Andrews, A. (1993). Balancing the personal and professional. In J. James & R. Farmer, (Eds.), *Spirit, space, and survival: African American women in (White) academe.* New York, Routledge.

Back, L. and Solomos, J. (Eds.), (2000). *Theories of race and racism*. New York: Routledge.

Barondess, J.A. (1995). A brief history of mentoring. *Transactions of the American Clinical and Climatological Association, 106*, 1–24.

Blake-Beard, S. (2001). Mentoring relationships through the lens of race and gender. *Center for Gender and Organizational Effectiveness Insights, No. 10.* Boston, MA: Simmons Graduate School of Management.

Blake-Beard, S., Murrell, A., & Thomas, D. (2007). Unfinished business: The impact of race on understanding mentoring relationships. In B.R. Ragins & K. E. Kram (Eds.), *The handbook of mentoring at work* (pp. 223-247). Los Angeles, CA: Sage Publications.

Bloom, C. M. & Erlandson, D. A. (2003). African American women principals in urban schools: Realities, (re)constructions, and resolutions. *Educational Administration Quarterly 39*(3), 339-369.

Boags, R. (2008). *Mentorship: A pathway to career success* (pp. 56-57). Bloomington, IN: AuthorHouse.

Brunner, C.C., ed. (1999). *Sacred dreams: Women and the superintendency*. (p. ix). Albany, NY: State University of New York Press.

Brunner, C. C. & Grogan, M. (2007). *Women leading school systems: Uncommon roads to fulfillment.* Lanham, MD: Rowman & Littlefield Education.

Burke, R.J. (1984). Mentors in organizations. *Group and Organization Studies, 9,* 353-372.

Carter v. Shop Rite Foods, Inc., 470 F.Supp. 1150, 1160 (N.D.Tex.1979).

Clawson, J. (1979). Superior-subordinate relationships for managerial development. *Dissertation Abstracts International, 40*(04), 2198. AAT 7922200

Clayborne, H.L. & Hamrick, F.A. (2007). Rearticulating the leadership experiences of African American women in midlevel student affairs administration. *NASPA Journal, 44(1),* 123-146.

Cline, Z., & Necochea, J. (1997). Mentoring for school reform. *Journal for a Just and Caring Education, 3(2),* 141-159.

Cohen, R.J. & Swerdlik, M.E. (2002). *Psychological testing and assessment: An introduction to tests and measurement (5th Edition).* Boston, MA: McGraw-Hill Higher Education.

Colley, H. (2002). A 'rough guide' to the history of mentoring from a Marxist feminist perspective. *Journal of Education for Teaching, 28:* 3, 257-273.

Colley, H. (2003). Engagement mentoring for 'disaffected youth: a new model of

mentoring for social inclusion. *British Educational Research Journal, 29*: 4, 521-542.

Collins, E.G. & Scott, P. (1978) Everyone who makes it has a mentor. *Harvard Business Review*, 56, 89-101.

Crawford, K., & Smith, D. (2005). The we and the us. *Journal of Black Studies, 36*(1), 52-67.

Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research, 2nd ed.* Columbus, OH: Pearson Merrill Prentice Hall, 162-164.

Crutcher, B. N. (2007, July-August). Mentoring across cultures. *Academe Online.* Retrieved October 30, 2008, from www.aaup.org.

Darling-Hammond, L., LaPointe, M., Meyerson, D., Orr. M. T., & Cohen, C. (2007). *Preparing school leaders for a changing world: Lessons from exemplary leadership development programs.* Stanford, CA: Stanford University, Stanford Educational Leadership Institute.

Devita, M. C., Colvin, R. L., Darling-Hammond, L., & Haycock, K. (2007). *Education leadership: A bridge to school reform*. New York, N.Y.: The Wallace Foundation.

Douglas, C. (1997). *Formal mentoring programs in organizations: An annotated bibliography.* Greensboro, NC: Center for Creative Leadership.

Eby, L. T., McManus, S. E., Simon, S. A., & Russell, E. A. (2000). The protégé's perspective regarding negative mentoring experiences: The development of a taxonomy. *Journal of Vocational Behavior, 57*, 1-21.

Eberspacher, J., & Sisler, G. (1988). Mentor relationships in academic administration. *Initiatives, 5(4),* 27-32.

Edelman, M. W. (2000). Spelman College: A safe haven for a young Black woman. *The Journal of Blacks in Higher Education, 27,* 118-123.

Eddy, E., Tannenbaum, S., Alliger, G., D'Abate, C., Givens, S. (2001). *Mentoring in industry: The top 10 issues when building and supporting a mentoring program.* Technical report prepared for the Naval Air Warfare Training Systems Division (Contract No. N61339-99-D-0012).

Ehrich, L.C., Hansford, B., & Tennent, L. (2004, October). Formal mentoring programs in education and other professions: A review of the literature. *Educational Administration Quarterly, 40*(4), 518-540.

Eliot, C. (1980). Introductory note. In Eliot, C., (Ed.) *The Harvard Classics.* Danbury, Connecticut: Grolier Enterprises.

Enomoto, E.K., Gardiner, M.E., & Grogan, M. (2000, December). Notes to Athene: Mentoring relationships for women of color. *Urban Education, 35(5),* 567-583.

Feiman-Nemser, S., Parker, M.B. & Zeichner, K. (1992). *Are mentor teachers teacher educators?* (Report No. NCTRL-RR-92-11). East Lansing, MI: National Center for Research on Teacher Learning. (ERIC Document Reproduction Service No. ED353251).

Gajda, R. & Militello, M. (2008). Recruiting and retaining school principals: What we can learn from practicing administrators. *AASA Journal of Scholarship and Practice, 5*(2), 14-20.

Gardiner, M., Enomoto, E., & Grogan, M. (2000). *Coloring outside the lines*. Albany, NY: State University of New York Press.

Gardenswartz, L. & Rowe, A. (Eds.) (1998) *Managing diversity: A complete desk reference and planning guide.2nd Edition.* New York, NY: McGraw-Hill.

Gibb, S., Megginson, D. (1993) Inside corporate mentoring schemes: A new agenda of concerns. *Personnel Review 22(1/2),* 40-54.

Glass, T. E.**,** Björk, L. & Brunner, C. C (2000). *The study of the American superintendency 2000: A look at the superintendent in the new millennium*. Arlington, VA: American Association of School Administrators.

Green, S.B. & Salkind, N.J. (Eds.). (2008). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (5th Ed.). Upper Saddle River, New Jersey: Pearson Prentice Hall.

Guadagnoli E. & Veliver, W.F. (1988). Relations of sample size to the stability of component patterns. *Psychological Bulletin, 103,* 265-275.

Haar, J. M.. & Robicheau, J. W. (2009, January). Women of color school leaders: Leadership schools should not ignore. *Journal of Women in Educational Leadership. 7*(1), 33-41.

Haberman, M. (1995). *Star teachers of children in poverty.* West Lafayette, IN: Kappa Delta Pi.

Haberman, M. (1999). *Star principals: Serving children in poverty.* Indianapolis, IN: Kappa Delta Pi.

Higgins, M. C. & Kram, K. E. (2001). Mentoring at work: A developmental network

perspective. *The Academy of Management Review 26(2),* 264-288.

Higgins, M. C., Chandler, D.E. & Kram, K. E. (2007). Developmental initiation and developmental networks. In B.R. Ragins & K. E. Kram (Eds.), *The handbook of mentoring at work* (pp. 349-372). Los Angeles, CA: Sage Publications.

Hill, M., & Ragland, J. (1995). *Women as educational leaders: Opening windows, pushing ceilings.* Thousand Oaks, CA: Corwin Press.

Hollie, S. (2001a) Acknowledgement, affirmation, and accommodation: the non-standard language approach. *Academic Exchange Quarterly 5(3),* 142-147.

Hollie, S. (2001b) Acknowledging the language of African American students: Instructional strategies. *The English Journal 90(4),* 54-59.

Hollie, S. (n.d.) Culturally responsive pedagogy strand. *The Center for Culturally Responsive Teaching and Learning.* Retrieved July 11, 2010, from http://www.cultureandlanguage.org/CRPofferings.html

Holmes, S. L., Land, L. D., & Hinton-Hudson, V. D. (2007). Race still matters: Considerations for mentoring Black women in academe. *The Negro Educational Review 58(1-2),* 105-129.

Holy Bible: Revised Standard Version. (1952). New York: Thomas Nelson & Sons.

Homer. (1990). *The odyssey.* (R. Fitzgerald, Trans.). New York: Vintage Press. (Original work published approximately 800 B.C.).

hooks, b. (2000). Racism and feminism: The issue of accountability. In L. Back and J. Solomos (Eds.), *Theories of race and racism* (pp 373-388). New York: Routledge.

Jackson, B. L. (1999). Getting inside history—Against all odds: African American women school superintendents. In C. Brunner (Ed.), *Sacred dreams: Women and the superintendency*. Albany, NY: State University of New York Press.

Jacob, B. A. (2007, Spring). The challenges of staffing urban schools with effective teachers. *The Future of Children* 17(*1*), 129-153.

James, J. & Farmer, R. (Eds.) (1993). *Spirit, space, and survival: African American women in (White) academe.* New York: Routledge.

Johnson, G. (1998). African American women administrators as mentors: Significance and strategies. *Initiatives 58(3),* 49-56.

Johnson, W. B. (2002). The intentional mentor: Strategies and guidelines for the practice of mentoring. *Professional Psychology: Research and Practice, 33,* 88-96.

Kearney, J. E. (2008). Factors affecting satisfaction and retention of African American and European American teachers in an urban school district: Implications for building and maintaining teachers in school districts across the nation. *Education and Urban Society, 40*(5), 613-627.

Keith, K. M. (2008). *The case for servant leadership.* Westfield, IN: The Greenleaf Center for Servant Leadership.

Koberg, C.S., Boss, R.W., Chappell, D., & Ringer, R. C. (1994). Correlates and consequences of protégé mentoring in a large hospital. *Group & Organization Management. 19* (2), p. 219-239. Doi: 10.1177/1059601104102007. Retrieved August 14, 2010 from ABI/INFORM Global.

Kochan, F. K. (2002). *The organizational and human dimensions of successful*

mentoring programs and relationships. Greenwich, CT: Information Age Publishing Inc.

Kram, K. E. (1983). Phases of the mentor relationship. *Academy of Management Journal, 26(4),* 608-625.

Kram, K. E. (1985). *Mentoring at work.* Glenview, IL: Scott Foresman.

Kram, K. E. & Isabella, L. A. (1985). Mentoring alternatives: The role of peer relationships in career development. *Academy of Management Journal, 28,* 110-132.

Landau, J. (1995). The relationship of race and gender to managers' ratings of promotion potential. *Journal of Organizational Behavior, 16,* 391-400.

Lankau, M.J. & Scandura, T.A. (2007) Mentoring as a forum for personal learning in organizations. In B.R. Ragins & K. E. Kram (Eds.), *The handbook of mentoring at work* (pp. 95-102). Los Angeles, CA: Sage Publications.

Leadership in Educational Administration Development Study Group on Women and Minorities. (1990). *Strengthening support and recruitment of women and minorities to administrative positions: A resource manual.* Washington, D.C.: National Leadership Network.

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 A. Knopf.

Lindsay, B. (1994). African American women and Brown: A lingering twilight or emerging dawn? *The Journal of Negro Education, Vol. 63, No. 3, Brown v. Board of Education at 40: A Commemorative Issue Dedicated to the Late*

Thurgood Marshall. Retrieved April 22, 2009 from http://www.jstor.org/stable/2967193.

Melendez de Santa Ana, T. (2008). Opening up the superintendency. *Leadership Magazine, 38*(2). Retrieved April 14, 2011 from http://www.acsa.org/FunctionalMenuCategories/Media/LeadershipMagazine/2008-archives/LeadershipCurrentIssue/OpeningtheSuperintedency.aspx

Missirian, A. *The corporate connection: Why executive women need mentors to reach the top.* Englewood Cliffs, NJ: Prentice-Hall, 1982.

Missouri Department of Elementary and Secondary Education (2009). *2008-09 School District Report Card: XXXX School District*. Retrieved December 18, 2009 from http://dese.mo.gov/schooldata/school_data.html

Moore, K. (1982). The role of mentors in developing leaders for academe. *Educational Record,(63)*1, 22-28.

Murrell, A. (2007). Five key steps for effective mentoring relationships. *The Kaitz Quarterly (1)*1, 1-9.

Murrell, A., Crosby, F. J., & Ely, R. J. (Eds.), 1999. Mentoring dilemmas: Developmental relationships within multicultural organizations. Mahwah, NJ; Lawrence Erlbaum Associates.

Nefstead, S., & Nefstead, S. (2005). Mentoring in the '90s and beyond. (FO-06447). University of Minnesota Extension, Education Department.

Noe, R.A. (1988a). An investigation of the determinants of successful assigned mentoring relationships. *Personnel Psychology (41)3,* 457-479.

Noe, R. A. (1988b). Women and mentoring: A review and research agenda. *The Academy of Management Review (13)1,* 65-77.

Ortberg, J. (2003). *Everybody's normal till you get to know them*. Grand Rapids, MI: Zondervan.

Papelweis, R. (1991). *Preparing School Administrators for the Culturally and Linguistically Diverse. A Formal Mentor Training Program in Progress*. ERIC # ED333094.

Phillips, L. (1977). Mentors and protégés: A study of the career development of woman managers and executives in business and industry. UCLA Dissertation, UMI.

Planty, M., Hussar, W., Snyder, T., Kena, G., KewalRamani, A., Kemp, J., Bianco, K., & Dinkes, R. (2009). *The Condition of Education 2009* (NCES 2009-081). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

Ragins, B., Cotton, J., & Miller, J. (2000). Marginal mentoring: The effects of type of mentor, quality of relationship, and program design on work and career attitudes. *Academy of Management Journal, 43*(6), 1177-1194.

Ragins, B. & Kram, K. (Eds.). (2007). *The handbook of mentoring at work*. Los Angeles, CA: Sage Publications.

Revere, A. B. (1987). Black women superintendents in the United States: 1984-1985. *Journal of Negro Education, 56(4),* 510-520.

Roberts, A., (1999, November). Homer's mentor duties fulfilled or misconstrued? United Kingdom: *History of Education Journal*.

Roche, G. R. (1979). Much ado about mentors. *Harvard Business Review, 1*, 14-31.

Sadker, M., Sadker, D., & Klein, S. (1991). The issue of gender in elementary and secondary education. *Review of Research in Education, 17,* 269-334.

Scandura, T. A. (1992). Mentorship and career mobility: An empirical investigation. *Journal of Organizational Behavior, 13*, 169-174.

Schlimpert, T. (2008) *New mentor training: Administrative mentoring program (AMP)*. Proceedings at the symposium presented by the Missouri Department of Elementary and Secondary Education, October 8, 2008. Mehlville High School, St. Louis, MO.

Schramm, S. L. (2000). *Thinking thrice: A feminist response to "mentoring" that marginalizes*. Opinion Paper. Columbia, SC: University of South Carolina. (ERIC Document Reproductive Service No. ED466463).

Shakeshaft, C., Irby, B., Brown, G., Grogan, M. & Ballenger, J. (2007) Increasing gender equity in educational leadership. In S. Klein (Ed.), *Handbook of gender equity* (pp. 103-129). New Jersey: Lawrence Earlbaum Associates.

Shakeshaft, C. (in press). Gender and educational change. In Hargreaves, A.; Lieberman, A.; Fullan, M.; Hopkins, D. (Eds.) *Second International Handbook of Educational Change*. New York: Springer Publishing Company. Retrieved May 6, 2010 from http://www.soe.vcu.edu/departments/el/faculty_publications/Shakeshaft_Gender_Educat.pdf

Shelton, S. (2010). *Strong leaders strong schools: 2009 state laws*. Washington, D.C.: National Conference of State Legislatures.

Shollen, S. L., Bland, C. J., Taylor, A. L., Weber-Main, A. M., & Mulcahy P. A. (2008). Establishing effective mentoring relationships for faculty, especially across-gender and ethnicity. *American Federation of Teachers, 4*, 131-158.

Singleton, G. E., & Linton, C. (2006). *Courageous conversations about race: A field guide for achieving equity in schools.* Thousand Oaks, CA: Corwin Press, Inc.

Socialnomics09. (2009). Social media revolution: Is social media a fad? [Video file] Retrieved from http://www.youtube.com/watch?v=sIFYPQjYhv8

Stanley, C.A. & Lincoln, Y.S. (2005). Cross-race faculty mentoring. *Change (37)2,* 44-50.

Strizek, G.A., Pittsonberger, J.L., Riordan, K.E., Lyter, D.M., and Orlofsky, G.F. (2006). *Characteristics of schools, districts, teachers, principals, and libraries in the united states: 2003-04 schools and staffing survey* (NCES 2006-313 Revised). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Sullivan-Brown, K. (2002). The Missouri Teachers' Academy: Mentoring for organizational and personal transformation. In F. K. Frances (Ed.), *The organizational and human dimensions of successful mentoring programs and relationships* (pp. 141-151). Greenwich, Ct: Information Age Publishing Inc.

Tillman, B., Cochran, L. (2000). Desegregating urban school administration: A pursuit of equity for Black women superintendents. *Education and Urban Society, 33 (1),* 44-59.

U. S. Bureau of Labor Statistics. (2009). *Average Annual Data Characteristics of the*

employed: Employed persons by detailed occupation, sex, race, and Hispanic or Latino ethnicity. Labor Force Statistics from the Current Population Survey. Retrieved April 14, 2010, from ftp://ftp.bls.gov/pub/special.requests/lf/aat11.txt.

Villar, A. & Strong, M. (Summer 2007) Is mentoring worth the money? A benefit-cost analysis and five-year rate of return of a comprehensive mentoring program for beginning teachers. *ERS Spectrum: A Journal of Research and Information*, 25 (3), 1-17. Retrieved September 27, 2009 from www.newteachercenter.org/pdfs/ Spectrum_Villar-Strong.pdf.

Wang, J., Odell, S.J., & Schwille, S.A. (2008). Effects of teacher induction on beginning teachers' teaching: A critical review of the literature. *Journal of Teacher Education, 59*(2), 132-52.

Watkins v. Scott Paper Company, 530 F. 2d 1159. (US: Court of Appeals, 5th Circuit 1976).

Wickmann, F. & Sjodin, T. (1997). *Mentoring: The most obvious yet overlooked key to achieving more in life than you dreamed possible.* New York: McGraw-Hill.

Wilcox, K. K. (2002). Matching mentors and protégés: Dynamics of race, ethnicity, gender, and job location. In F. K. Frances (Ed.), *The organizational and human dimensions of successful mentoring programs and relationships.* (pp. 243-265). Greenwich, Ct: Information Age Publishing Inc.

Wrushen, B.R. & Sherman, W. H. (2008). Women secondary school principals: Multicultural voices from the field. *International Journal of Qualitative Studies in Education, 21(5),* 457-469.

Zey, M.G. (1985). Mentor programs: Making the right moves. *Personnel Journal, 64,* 53-57.