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MENTORING FUNCTIONS WITHIN THE AMERICAN COUNCIL ON EDUCATION (ACE) FELLOWS LEADERSHIP DEVELOPMENT PROGRAM: A MIXED METHODS STUDY

By

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Under the Supervision of Professor Richard J. Torraco

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Mentoring Functions within the American Council on Education (ACE) Fellows Leadership Development Program: A Mixed Methods Study

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University of Nebraska, 2012

Advisor: Richard J. Torraco

The purpose of this study was to examine and better comprehend the concept of mentoring within the American Council on Education (ACE) Fellows Program. This study addressed the functions of mentoring and how they applied to those participating in the ACE Fellows Program—from the Fellows' (or protégés') perspectives. A sequential explanatory mixed methods design was used, and it involved collecting quantitative data followed by qualitative data. Due to the fact there is a shortage of campus leaders because of increased retirement, gaining knowledge in how to develop future administrators would be beneficial. Such a mixed methods study proposed what functions of mentoring likely enhanced the learning experience, including how they did so.

Data were collected via survey and interview methods. The survey was employed to determine which mentoring functions ACE Fellows experienced in their Fellowship and which they believed to have been most beneficial in their own leadership development. Three classes of Fellows were asked to participate in the study; 36 usable surveys were returned from the 98 sent out. Upon collection of the survey results, nine individuals were selected for follow-up explanatory interviews in which additional details

were learned. The information learned in the follow-up interviews allowed the researcher to draw parallels among the information.

Results from the survey demonstrated specific mentoring functions that were most utilized and least utilized. In addition, Fellows provided their perception of which function(s) were most and least beneficial to their own leadership development. Based upon the follow-up interviews that were conducted, themes emerged: multiple sources of mentorship were perceived as beneficial; many desired additional follow-up mentoring; and collectively, psychosocial functions were positively viewed.

DEDICATION

Dedicated with love to my family:

Kyle, Kai and Baby-to-be

And, to my devoted parents:

Charles and Judy

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There are numerous individuals who have assisted in my completion of this study. I would like to sincerely thank my adviser, Dr. Rich Torraco, for his continued assistance and guidance over the years. Other members of my committee who played an integral role in the completion of this dissertation included Dr. Gwendolyn Combs, Dr. Miles Bryant, Dr. Larry Dlugosh, and Dr. L. James Walter. In addition, I'd like to express my sincere thanks to Dr. Sharon McDade, Director of the ACE Fellows Program. Without her commitment to the project, the study would not have been possible. Finally, I would like to thank my many colleagues at Peru State College for their support and encouragement.

To my family, thank you for believing in me. You all make up the most amazing support system! Specifically, I am truly grateful for the upbringing my parents and brother, Jay, provided. They have continually demonstrated the value of a strong work ethic, perseverance, and integrity. I am also extremely thankful to my husband, Kyle, for his continued trust, guidance, and encouragement as well. We truly do make a great team!

TABLE OF CONTENTS

Dedication iv

Acknowledgements v

Table of Contents vi

CHAPTER 1: INTRODUCTION TO THE STUDY

Introduction to the Problem 1

Purpose of the Study 6

Research Questions 6

Philosophical Foundations 7

Data Gathering Methods 8

Definition of Terms 9

Assumptions 11

Delimitations and Limitations 12

Significance of the Study 12

CHAPTER 2: LITERATURE REVIEW

Review of the Purpose and Introduction 14

Search Process 14

Research and Theoretical Support 15

Review of the Relevant Literature 17

The History and Nature of Mentoring 17

Mentoring Components 17

Forms of Mentoring 18

Mentoring in Higher Education 20

The Benefits of Mentoring 21

Barriers to Mentoring 22

Mentoring as Succession Planning 25

Developmental Alternatives to Mentoring 28

Human Resource Development in Higher Education 29

What is Leadership Development? 30

Models of Career Development 31

Promotion and Tenure within Higher Education Career Development 35

Strategic Human Resource Development in Higher Education 37

Understanding Mentoring Function within Leadership Development 39

CHAPTER 3: METHODOLOGY AND DESIGN

Design of the Study 43

Samples and Permissions 47

Quantitative Sample 47

Qualitative Sample 48

Instrumentation 50

Quantitative Survey 50

Qualitative Interviews 51

Data Collection Procedures 52

Quantitative Data Collection 53

Qualitative Data Collection 57

Data Analysis Procedures 59

Quantitative Data Analysis 59

Qualitative Data Analysis 60

Mixed Methods Data Analysis 63

Ethical Considerations 63

Researcher's Resources and Skills 63

CHAPTER 4: DATA ANALYSIS

Description of the Sample 65

Quantitative Data Analysis 66

Research Question 1 69

Research Question 2 70

Research Question 3 72

Research Question 4 73

Qualitative Data Analysis 77

Research Question 5 79

Research Question 6 83

Research Question 7 87

Summary 89

CHAPTER 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of Research Study 91

Review of Purpose 91

Review of Supporting Literature 91

Review of Methods and Procedures 94

Conclusions 97

Review of Research Questions 97

Recommendations 100

Summary 102

REFERENCES 103

APPENDIXES

Appendix A: IRB Approval 117

Appendix B: Research Design Model 119

Appendix C: Endorsement Letter from the ACE Fellows Director 120

Appendix D: Email Cover Letter and Survey Link 121

Appendix E: Follow-Up Email Cover Letter and Survey Link 123

Appendix F: Final Follow-Up Email, Survey Link, and Thank You 125

Appendix G: Survey Instrument 126

Appendix H: Email Invitation to Participate in Follow-Up Interview 134

Appendix I: Informed Consent Form for Follow-Up Interview Participants 135

Appendix J: Follow-Up Interview Questions 136

Appendix K: Hypothesized Conceptual Model 138

Appendix L: Proposed Conceptual Model 139

Appendix M: Resultant Data 140

CHAPTER 1: INTRODUCTION TO THE STUDY

Introduction to the Problem

Turnover among higher education leadership has been estimated to be at least 50% within the next five to 10 years (Leubsdorf, 2006). In fact, research has shown that for community colleges, more than three-quarters of their presidents and senior administrators were estimated to leave within the first decade of the millennium (Bumphus & Neal, 2008). In a recent study from King and Gomez (2008), they found that 92% of all current college/university presidents were 51 years of age or older. Furthermore, of that group, 49% were found to be 60 years of age or older. When looking at all senior administrators, 66% were identified as being 51 years of age or older. Ultimately, much of this is due to the baby-boomer generation entering or nearing retirement.

To further complicate matters, the majority of current faculty, who could potentially fill administrative positions, has primarily focused on research and teaching, therefore resulting in a lack of administrative leadership experience. Furthermore, administrative leaders' terms in office are somewhat short when compared to most faculty members' tenure; over the last 30 years, campus presidents have averaged 7-year terms (Kezar, 2009; ACE, 2007). As quoted in *The Chronicle of Higher Education*, developmental programs are invaluable for those with little to no administrative experience:

> If you are coming up through the faculty ranks—as the vast majority of future presidents do—you aren't always exposed to the financial and managerial sides of the institution. Financial realities and legal potholes are two things you need to

> learn about. If you don't understand the legal liabilities you can generate with a group of 18-to 22-year-olds unwittingly, your institution can be in a very large pot of hot water in a very brief period of time. (Carr, 1999, p. A37)

McDade (1998) has also acknowledged that individuals must quickly develop necessary knowledge, skills, and abilities when leading an institution. Warner and DeFleur (1993) agreed: "…colleges and universities are large, complex institutions requiring significant management and fiscal expertise and faculty members typically do not develop this expertise in the normal course of activities" (p. 5). With this being the case, how can individuals become more readily prepared or qualified to fill these upcoming vacancies in higher education administration?

Higher education, a setting devoted to the enhancement of learning, inquiry, and development, lacks effective continuing development for individuals aspiring to be future campus leaders (Bornstein, 2005; Hargrove, 2003). This is especially true when examining leadership development for faculty in higher education. According to Green and McDade (1994), the scarcity of development programs is paradoxical:

> Ironically, we pay little attention to enhancing the ability of administrators and faculty to lead our institutions: the priority is low and our investment is modest. The corporate sector, on the other hand, spends $40 billion a year on training. Surely, higher education—a $150 billion dollar enterprise—should not consider leadership development less important than the corporate sector does. (p. 3)

The field of education has followed successful business organizations in recognizing mentoring as a critical component of effective leadership development (Remy, 2009). Since mentoring is said to play a vital role in leadership development,

additional research to examine how it aids in leadership development is warranted. Braxton (2005) also noted in her research the impetus for such a study due to "the high rate of turnover in campus senior administrative positions and the limited effort directed toward the development of qualified individuals…" (p. 11). Mentoring is now often recognized within the realm of human resource development (HRD) as a tool to provide such development; however, this recognition does not mean that mentoring is deeply understood or often applied (McCauley, 2005).

According to Gibbons (2000), "mentoring is a protected relationship in which learning and experimentation can occur, potential skills can be developed, and in which results can be measured in terms of competence gained rather than curricular territory covered" (p. 18). Such a relationship sounds ideal to garner future leaders of academic institutions.

Significant mentoring research has been conducted by Kram (1983, 1985, 1988). In her early stages of studying, she proposed a conceptual model identifying both career development and psychosocial functions of mentoring. Much of the mentoring research has occurred in the business sector. As Brown (2010) noted in his recent dissertation, there is an abundance of literature in the business sector; however, to find detailed studies regarding mentoring in higher education becomes much more difficult.

As defined by Kram (1983) "career functions are those aspects of the relationship that primarily enhance career advancement," such as sponsorship, exposure-and-visibility, coaching, protection, and challenging assignments (p. 614). Psychosocial functions are defined as "those aspects of the relationship that primarily enhance sense of

competence, clarity of identity, and effectiveness in the managerial role," such as role modeling, acceptance-and-confirmation, counseling, and friendship (p. 614).

"Extant theoretical and empirical research is clear that career and psychosocial functions serve as the primary distinct and reliable overarching operationalization of mentoring provided" (Allen, Eby, Poteet, Lentz, & Lima, 2004, p. 128). These functions define the multiple roles a mentor may portray, as well as the disposition in which the protégé develops. Once aware of the functions that mentoring provides, one may begin to question which, if any, are more common or beneficial within mentoring relationships among those seeking leadership development in higher education. As Rosser (2004) noted in her dissertation, she was not aware of any research that has tried to validate Kram's research on mentoring functions.

Multiple perspectives of research continue to be conducted regarding mentoring. One perspective has loosely examined mentoring within the realm of higher education, a developmental learning ground. In such a setting, mentoring, an interpersonal relationship that fosters support between a mentor and a protégé, seems to be an ideal developmental tool for individuals desiring to learn campus leadership fundamentals. However, few true mentoring programs exist in higher education and little is deeply known about mentoring as a form of leadership development in higher education.

One such formalized program that is available to those working in higher education is offered by the American Council on Education (ACE). "Founded in 1918, the American Council on Education (ACE) is the nation's unifying voice for higher education" (About ACE, 2010). ACE's Fellows Program is thought to be one of the most successful mentoring programs in higher education that "places aspiring institutional

leaders in on-site internships with experienced senior administrators" (Bornstein, 2005, p. 11). It is known as the nation's premier leadership development program for those in higher education. Since the beginning of the program, over 250 Fellows have progressed to college presidents and over 1,000 have become college vice presidents or deans (Forty years of ACE Fellows, 2005). This program seeks "to furnish middle-management academicians with up-close exposure to senior executive jobs while helping them to hone the leadership and management skills required for leading a postsecondary institution (Ruffins, 1998, p. 28). Such a program allows protégés to take part in the leadership at the host institution and immerse themselves in the culture, policies, and decisions (ACE Fellows Program, 2010).

It is presumed that the ACE Fellows Program provides lessons of leadership development through mentoring that higher education institutions desire. Having the knowledge to expand or offer additional such programs would provide more long-term preparatory opportunities for those devoted to becoming academic leaders. Thus, this mixed methods study is designed to discover which function(s) of mentoring the ACE Fellows Program participants—the Fellows (or protégés)—perceived to be the most/least utilized throughout the mentoring relationship and most/least beneficial in enhancing their leadership development. Gathering both quantitative and qualitative data within one study is not common in mentoring research. Furthermore, the ACE Fellows program has not been intensely examined with regard to mentoring functions, therefore resulting in an identified need for extending the current research base.

Purpose of the Study

The purpose of this study was to examine and better comprehend the concept of mentoring within the American Council on Education (ACE) Fellows Program. This study addressed the functions of mentoring and how they apply to those participating in the ACE Fellows Program—from the Fellows' (or protégés') perspectives. A sequential explanatory mixed methods design was used, and it involved collecting quantitative data followed by qualitative data (Creswell & Plano Clark, 2007, p. 72). The qualitative data further explains the quantitative data in more depth. In the first phase, quantitative survey data were collected from ACE Fellows participants via an email link. It identified which career development and psychosocial functions of mentoring were utilized and to what degree they were beneficial to an individual's leadership development. The second phase involved conducting interviews with select survey respondents in an effort to better understand their mentoring experiences. These were conducted over the phone and via email. In this explanatory follow-up, participants were selected based on typical sampling for case study research. Such a mixed methods study could identify which mentoring functions likely enhance the learning experience, including how they do so, in developing future campus leaders.

Research Questions

This study was designed to answer the following research questions:

Quantitative Questions

1. To what extent are career development functions of mentoring utilized in the ACE Fellows program?

2. To what degree are career development functions beneficial to leadership development for the ACE Fellows?
3. To what extent are psychosocial functions of mentoring utilized in the ACE Fellow program?
4. To what degree are psychosocial functions beneficial to leadership development for the ACE Fellows?

Qualitative Questions

5. What are the perceptions and experiences of protégés in regard to career development functions utilized in the ACE Fellows program?
6. What are the perceptions and experiences of protégés in regard to psychosocial functions utilized in the ACE Fellows program?

Mixed Methods Question

7. What additional information is gained about mentoring functions from the qualitative follow-up interviews that was not available from the quantitative Likert scales?

Philosophical Foundations

It is important to note the worldview that was utilized within this research study. Worldviews "represent different views on the nature of reality (ontology), how we gain knowledge of what we know (epistemology), the role values play in research (axiology), the process of research (methodology), and the language of research (rhetoric)" (Creswell & Plano Clark, 2007, p. 23). The general philosophy engaged in this research was pragmatism. Pragmatism is often the paradigm or worldview of choice when conducting mixed methods research. "It draws on many ideas, including employing 'what works',

using diverse approaches, and valuing both objective and subjective knowledge" (Creswell & Plano Clark, 2007, p. 26).

Data Gathering Methods

This study utilized a survey technique to gather quantitative data from participants. An online survey instrument was developed by the researcher. In addition, colleagues of the researcher pre-tested the survey to ensure content and criterion validity. Reliability analyses of the instrument were conducted using Cronbach's alpha; Cronbach's alpha has a value that ranges from 0 to 1. The closer the value of alpha is to 1, the more reliable the measure. The value of alpha should range from .70 to 1.00 (Jackson, 2003). The reliability analyses of the instrument conducted during the study provided values at or above .77, indicating the instrument was found to be reliable.

In addition, follow-up open-ended interviews were conducted with purposively select participants based on typical sampling from the survey responses. Individuals who completed the survey were able to volunteer themselves to be considered for the second phase of the study; those who chose not to provide contact information for a follow-up interview remained anonymous. The researcher estimated interviewing approximately nine individuals, or nearly 10% of those surveyed, which should be an appropriate number of cases to yield data leading to a saturation point. Due to this being an initial study of mentoring functions within the ACE Fellows Program, the researcher is not specifically looking to find an atypical, extreme, deviant, or intensely unusual sample (Merriam, 1998).

Definition of Terms

For clarification, the following terms are defined, based on their use in this study:

Host institution refers to the institution at which the protégé resides while participating in the ACE Fellows program. The mentor is employed by this institution during their Fellowship.

Local/home institution refers to the institution from which the protégé is taking leave in order to participate in the ACE Fellows program.

Leadership refers to "a process in which leaders are not seen as individuals in charge of followers, but as members of a community of practice" (Horner, 1997, p. 277).

Leadership development refers to an individual's belief that his/her leadership knowledge, skills, and abilities have progressed over a course of time due to some type of experience.

Mentor refers to the individual providing mentoring or guiding the mentoring relationship from a more experienced or expert perspective.

Protégé refers to the individual who receives mentoring from a novice perspective. For the purpose of this study, the terms protégés and Fellows may be used interchangeably.

Career functions refer to those "aspects of the relationship that primarily enhance career advancement" (Kram, 1983, p. 614).

Sponsorship refers to the opportunities that are created for the protégé to demonstrate competence and learning, such as nominating the protégé for lateral moves and/or promotions (Kram, 1983, 1985).

Exposure-and-visibility refers to doors being opened or the connections that are made to support the protégé's career advancement with opportunities to demonstrate performance (Noe, 1988; Kram, 1985).

Coaching refers to the mentor teaching the protégé the "ropes." Relevant positive and negative feedback is given by the mentor to improve the protégé's performance and potential (Kram, 1985; Hunt & Michael, 1983).

Protection refers to the support a mentor provides in difficult situations, shielding the protégé from potentially damaging situations (Noe, 1988; Kram, 1985).

Challenging assignments refer to supporting assignments that stretch the protégé's knowledge and skills in order to obtain competence in the profession and feelings of accomplishment in the field (Noe, 1988; Kram, 1985; Philips-Jones, 1982).

Psychosocial functions refer to "those aspects of the relationship that primarily enhance sense of competence, clarity of identity, and effectiveness in the managerial role" (Kram, 1983, p. 614).

Role modeling refers to the behaviors, attitudes, and/or skills that are demonstrated by the mentor that aid in the protégé achieving competence, confidence, and a clear professional identity (Noe, 1988; Kram, 1985).

Acceptance-and-confirmation refers to the ongoing support and respect that a mentor portrays for a protégé to strengthen their self-confidence and self-image (Noe, 1988; Kram, 1985; Zey, 1984; Philips-Jones, 1982).

Counseling refers to the helpful and confidential nature of the relationship. The mentor acts as a sounding board by demonstrating listening, trust, and rapport with the protégé (Kram, 1985; Levinson et al., 1978).

Friendship refers to the mutual caring that extends beyond the daily work environment. Experiences that occur about work and outside work are shared (Kram, 1985; Clawson, 1980).

Job shadowing refers to an individual observing an employee in a position that he/she wishes to learn more about for knowledge or for future career possibilities, in an effort to better determine day-to-day responsibilities.

Course-based leadership development refers to structured, facilitated leadership development opportunities that are communicated to participants via an educational-type course.

Sabbaticals refer to the time away from educational duties and responsibilities on campus. Faculty often take sabbaticals for research and/or professional development.

Assumptions

The underlying assumption of this study was that the highly touted ACE Fellows Program often leads to positive leadership development outcomes for participants. It is assumed that those responding to the questions provided within the survey were being answered honestly and to the best of the participant's ability. Additionally, the degree to which the mentoring experience has aided in personal and professional leadership development is assumed to be reflective of the initiative exhibited or effort demonstrated on behalf of both the ACE Fellows mentor and protégé. Furthermore, the researcher's personal assumption includes the belief that mentoring is a positive experience and provides beneficial results.

Delimitations and Limitations

A delimitation of this study was that it only applies to individuals who received or provided mentoring as part of the ACE Fellows program. The organizational cultures, the scope of leadership responsibilities, and campus climate attributes can all affect mentorship experiences. This study did not account for such aforementioned concepts.

A limitation to the quantitative survey method within this study was that the response rate could have likely been higher, as many prefer of their survey data. Another limitation resulted from the qualitative portion of the study; the follow-up interviews only captured the in-depth experiences of those specific cases studied and are not necessarily representative of the entire sample. Additionally, data collected was self-reported. Thus, other views or perceptions from the host or home institutions were not part of data collection.

An additional limitation to the study could have been the timeframe chosen for the research. Because some individuals have not had the opportunity to fully develop and implement their knowledge, skills, and abilities garnered from the ACE Fellows Program, the overall perceptions may not be readily available or fully developed. Some other factors that could have affected perceptions of the individuals participating in the study were their previous experiences and their innate abilities.

Significance of the Study

It has been suggested that mentoring is a well-known form of employee development because of the relationship that develops between a mentor and a protégé. While this may be the case, very few formal mentoring programs exist in higher education. While investigating such a well-known and successful initiative, the American

Council on Education (ACE) Fellows Program, the opportunity became available to demonstrate the successes and limitations such mentoring functions provide to those in higher education leadership. In addition, this new knowledge will assist in determining areas that are important for future research and application to broader leadership populations outside of higher education.

CHAPTER 2: LITERATURE REVIEW

Review of the Purpose and Introduction

The purpose of this study was to examine and better comprehend the concept of mentoring within the American Council on Education (ACE) Fellows Program. This study addressed the functions of mentoring and how they applied to those participating in the ACE Fellows Program—from the protégés' (Fellows') perspectives. A sequential explanatory mixed methods design was used, and it involved collecting quantitative data followed by qualitative data.

This chapter presents a review of the literature relevant to mentoring and higher education, including relevant leadership development materials, as well as the search process used. Literature on relevant research theories is also presented.

Search Process

Literature was examined in order to identify research specifically related to mentoring and higher education. Initially, databases were searched from three major discipline areas: business, education, and psychology. Specifically, Academic Search Premier (EBSCO), JSTOR, Lexis Nexis Academic, ArticleFirst, WorldCat, and Google Scholar were all searched. In addition to the databases, Dissertation Abstracts were reviewed to assist in identifying relevant research connected to mentoring and higher education. Relevant web-based sources were also identified. Key words utilized in the search included mentoring, formal mentoring, informal mentoring, mentoring functions, informal learning, faculty development, leadership development, professional development, employee development, and higher education.

Research and Theoretical Support

Wanberg, Welsh, and Hezlett (2003) developed a dynamic process model of formal mentoring. This model addresses participant and relationship antecedents, program antecedents, and organizational context and how they influence the mentoring relationship. In such instances, "mentoring affects proximal outcomes and distal outcomes for both mentors and protégés" (Egan, 2005, p. 491). Utilized hand-in-hand with adult learning theory, formal mentoring provides the opportunity for adults to recognize developmental possibilities. Along with the motivation to learn and desire to utilize real-life experiences, adults taking part in formal mentoring results in an optimal likelihood of personal and professional development.

The concept of experiential learning also provides a theoretical framework for mentoring functions as a form of leadership development (Cleminson & Bradford, 1996). Learning through experience is a well-known notion. Dewey postulated in the early 1900s that "education must be active and involved and that knowledge must be linked to experience" (Hornyak & Page, 2004, p. 466). Since Dewey's seminal work, many additional models of experiential learning have been developed. Kolb (1984) provided a simplistic representation of the cyclical process in four stages: (1) concrete experience, (2) reflective observation, (3) abstract conceptualization, and (4) active experimentation.

In addition, leadership development, specifically within higher education, has become a central focus. One continuing surge for the study of leadership is the evidence of a connection between it and organizational performance (Frearson, 2002; Hallinger & Heck, 1996). Multiple forms of leadership development have been studied: experiential leadership development, individual leadership development, and course-based leadership

development (Muijs, Harris, Lumby, Morrison, & Sood, 2006). Research is still being conducted to determine which method of leadership development is most effective. With mentoring being a form of experiential leadership development (Cleminson & Bradford, 1996), this study can add to the current literature base providing details about learning aspects of higher education leadership on-the-job through formal mentoring.

Adult education also provides a basis of theoretical support. “Informal and incidental learning is at the heart of adult education because of its learner-centered focus and the lessons that can be learned from life experience” (Marsick & Watkins, 2001, p. 25). Informal learning can occur anywhere, but it is not typically highly structured. It can, however, be intentionally encouraged to occur by an organization. Popular examples of informal learning include mentoring, coaching, networking, and self-directed learning (Marsick & Watkins, 2001).

The culture within higher education also needs to be considered when discussing mentoring programs. Tierney’s (1988) work provided a framework for examining higher education culture that includes six major components: Environment, Mission, Socialization, Information, Strategy, and Leadership. The socialization element represents one aspect in which mentoring can contribute additional information. Within Tierney’s (1988) framework, he asserted that socialization takes into account answering such questions as, “How do members become socialized? How is it articulated? What do we need to know to survive/excel in this organization?” (p. 8). Questions such as these provide a foundation in which mentoring seeks to offer answers.

Review of Relevant Literature

The History and Nature of Mentoring

The concept of mentoring dates back to Greek mythology in the book *The Odyssey*. Odysseus left the care of his household, specifically his son Telemachus, to his friend Mentor. Hence, the term mentor is often associated with concepts of advisor, friend, teacher, and counselor. Some of the earliest mentoring research utilized this classical concept with Levinson, Darrow, Klein, Levinson, and McKee (1978) describing mentoring as a foundational relationship to facilitate young adolescents into adulthood. Bell (2002) defined a mentor as someone who helps another individual learn something that he/she would otherwise not have learned at all or as well.

Hall (2002) defined mentoring as an "intentional relationship focused on developing self of [a] relatively unseasoned protégé through dialogue and reflection; an implicit focus on development of the next generation in context of interpersonal relationships" (p. 147). He emphasized the primary function of such a relationship is to develop the protégé's learning capacity by transmitting knowledge, organizational culture, wisdom, and experiences. According to Daresh (2001), mentoring is "an ongoing procession in which individuals in an organization provide support and guidance to others who can become effective contributors to the goals of the organization" (p. 3).

Mentoring Components

Kram (1983, 1985, 1988) provides a considerable stream of research on mentoring and mentoring relationships. She proposed a conceptual model identifying both career development and psychosocial functions of mentoring. Fast forward three decades from Kram's original proposal and the functions of mentoring are still being

deliberated. With the growing forms of mentoring, such as peer-to-peer mentoring, group mentoring, and virtual or e-mentoring, the standard or typical functions, roles, and/or expectations may need to be further researched (Gibson, 2004).

Various disciplines have studied mentoring, such as organizational behavior, management, human development, and psychology. The underlying presumption in these studies, no matter the focus, is mentoring may be a prominent "factor leading to upward mobility in employment, success in education, and personal development" (Crawford & Smith, 2005, p. 52).

Mentoring research can take many directions. Various studies have been based upon relations of those involved (Noe, 1988), sex-role orientation (Scandura & Ragins, 1993), and race and gender (James, 2000; Parker & Kram, 1993; Thomas, 1990). More research suggests that even organizational culture and hierarchical structure can affect mentoring experiences (Aryee, Chay, & Chew, 1996).

Forms of Mentoring

Mentoring can take on formal (official program, assignment, etc.) or informal relationships (calling others when needed, touching base at meetings, etc.). Although the length of relationships may vary depending upon the form, there are typically four predictable, yet not fully distinct, phases that each form encompasses (Kram, 1983). An Initiation phase begins the process in which the relationship begins. Next a Cultivation phase launches where the relationship reaches new levels; individuals continue to test the career and psychosocial functions that one another can provide. Next Separation occurs which allows individuals to regain more autonomy, both structurally within the

organization and emotionally. The last phase is Redefinition; the relationship takes on a new style, either in form or possibly ending completely (Kram, 1983).

Traditionally, mentoring has been considered more of an informal relationship between senior individuals (mentors) who are paired with younger individuals (protégés) in an organization. As Galbraith (2001) asserted, “informal mentoring is a relationship that occurs that is unplanned, and, in most cases, not expected. A certain ‘chemistry’ emerges drawing two individuals together for the purpose of professional, personal, and psychological growth and development” (p. 32).

Conversely, formal mentoring allows the organizations to define the overall process, the extent of the relationship, and the timeframe in which mentoring will occur (Foster, Poole, & Coulson-Clark, 2000-2001). Formal mentoring is often initiated by an organization to assist with one or more of the following functions: new employee socialization/enculturation, to complement established formal learning processes, improve performance, and/or realize potential (Gibb, 1999).

Phillips-Jones (1983) offered some insight for those looking to incorporate a formal mentoring program into their organization. She suggested that the mentoring be part of a larger career development initiative, allow participation to be voluntary, keep each phase short and manageable, and to select the mentors and protégés who wish to participate carefully. In addition, an orientation should be provided to demonstrate how flexibility in the program is allowed and encouraged, challenges should be expected and prepared for, and monitoring of the mentoring program is necessary for future improvement.

Mentoring in Higher Education

Levinson et al. (1978) understood that mentoring was extremely underdeveloped in the higher education setting. He stated, "Our system of higher education, though officially committed to fostering intellectual and personal development of students, provides mentoring that is generally limited in quantity and poor in quality" (p. 334). In a setting where individuals often work alone and many major resources are shared, such as secretaries and ample space, there is a constant battle for individuals to acclimate themselves to the culture of higher education. As one professor questions the 'do your own thing' concept, he notes that this often causes those in academe to struggle with their own needs and demands of the career, which leaves less time available to assist others. "Young faculty are supposed to be independent; a lot of times they don't know what they are doing—teaching, committees, supervision of students, sole authorships—and there is very little support. It's sink or swim" (Wright & Wright, 1987, p. 207).

Another motive to develop faculty in academe is for investment purposes. Typical academic budgets often reserve around 90% of the funds for faculty salaries. "By the time a new faculty member reaches the point of receiving or being denied tenure, the institution has invested anywhere between $500,000 to $1,000,000" in these individuals (Foster et al., 2000-2001, p. 2). If large sums of money and time are being invested in those working within higher education, the institutions should encourage growth and development in an effort to gain a 'return' on their investment by mentoring individuals to ensure attainment of tenure rather than continually rehiring faculty who end up being denied tenure due to lack of employee development. An obvious need has been

identified, yet little has been done within higher education to meet the challenge (Merriam, 1983; St. Clair, 1994).

The Benefits of Mentoring

Mentoring programs are often considered because of the positive effect they can have on those involved. Protégés in mentoring relationships often experience a multitude of benefits: improved self-confidence; an increased availability of advice and relevant information; an opportunity for encouraged reflection on practice; additional personal support; improved effectiveness; an awareness of culture, politics, and philosophy of the organization; and, access to a confidant for concerns or ideas (Alderman, 2000; Rawlings, 2002). “Increased job satisfaction, higher salary, faster promotion, firmer career plans, and the increased probability that a protégé will also become a mentor” are also common associations with mentored protégés (Wright & Wright, 1987, p. 204).

One specific study addressed the implementation of a mentoring program at a higher education institution. After six months had passed, participants (protégés) were asked to provide insight into benefits they received. Individuals appreciated the quantity and quality of information that was received from their mentor; there was no longer that feeling of isolation. The collaborative environment was also welcomed by the protégés as individuals felt more confident in their work (Darwin & Palmer, 2009).

Although most believe protégés are the sole beneficiaries in mentoring relationships, the mentors also reap rewards in these relationships. For example, much assistance could be received mutually from the protégé for multiple responsibilities. In addition, the mentor is able to make use of his/her accumulated experiences to further the experience of the protégé (Ragins & Scandura, 1999). Further benefits to the mentor

include a revived view of his/her role; enhanced job satisfaction; self-reflection; additional professional relationships; peer recognition; and, a proactive role being taken in regard to learning and development (Rawlings, 2002).

When examining one study of a formal leadership development program, mentor benefits were specifically investigated. Mentors who had participated in the program over the course of several years were interviewed. These mentors provided insight into benefits they received: meeting colleagues, developing networks, helping others achieve, gaining new perspectives, reflecting on own knowledge and skills, developing better listening and coaching skills, and overall increased and improved awareness (de Vries, Webb, & Eveline, 2006).

Additionally, even higher education institutions may observe benefits from mentoring programs. First of all, the costs associated with mentoring are often less in comparison with other types of employee development interventions (Gibb, 1999). In addition, Boice (1990) remarked that the cost of mentoring programs is insignificant when compared filling positions that have frequent turnover. In addition, institutions may notice increased commitment and productivity throughout the institution and decreased turnover among employees, as well as the ability to attract or recruit faculty who desire this developmental opportunity in academia. Other institutional benefits include more profound interaction among colleagues, greater communication, and increased networking (Anthony, n.d.; Rawlings, 2002).

Barriers to Mentoring

If mentoring can provide such great benefits, there must be some lingering doubts among higher education institutions preventing broader implementation of mentoring

programs. The most recognized barrier identified by protégés is that mentoring is only available to a ‘select few’ individuals—those who are on the ‘fast track’ for promotion. To potentially alleviate this, protégés could be allowed to voluntarily participate in formal programs. This would alleviate the feeling of alienation for those not perceived to be on the ‘fast track.’ Another drawback that is often noted by an overwhelming number of potential mentors/protégés is the time and energy that such relationships involve. Again, the benefits often outweigh the costs in terms of time and energy because of what can actually be accomplished (Nemanick, Jr., 2000; Kram, 1985).

Mentors may even feel that if they develop their protégés to their highest potential, they may be replaced by the up-and-coming protégé. Organizations can ease the burden associated with this thought by demonstrating that both individuals actually develop throughout the process, and replacement is highly unlikely within the organization due to mentoring. Instead, organizations, mentors, and protégés should consider this as a development tool for their succession planning (Ragins & Scandura, 1999). In addition, many potential mentors endure the feeling of being pulled in too many directions in needing to prepare and teach classes, publish, serve on committees, advise students, and other campus responsibilities (Penner, 2001).

Other barriers include counterproductive relationships. Fury (1979) identified five potential drawbacks of mentoring that can be applied within higher education: “(a) the mentor may lose power or influence, (b) the protégé may be limited to one person’s perspective, (c) the mentor could leave the organization, (d) the male mentor may want sexual favors from the female protégé, and (e) the protégé could become attached to a poor mentor” (p. 206). While these drawbacks are all based on the protégé’s perspective,

mentors may also be hindered in such mentoring relationships. A mentor may misidentify potential in a protégé; when the potential is not seen, this may reflect negatively upon the mentor. Characteristics of the protégé may make the relationship extremely difficult to handle effectively: the protégé may not be able to accept criticism, he/she may constantly need guidance, or listening skills may be lacking.

However, to reiterate, limited studies are available to demonstrate the wide-spread use of mentoring as a means of leadership development on higher education campuses. The transition from a faculty position to a leadership position requires necessary skills and commitment. These individuals will be required to move from a "discipline expert" to an "academic manager" role (Hargrove, 2003, p. 38). Such transition requires some form of development, and the availability and understanding of mentoring functions may be able to fill this void.

Because campus administrators have such high expectations bestowed upon them, adequate preparation is key. In a survey developed and distributed by *The Chronicle of Higher Education*, more than 750 of the 1,300 surveyed campus presidents provided feedback. One of the major findings of the study was that leaders often are not fully prepared for the position. Higher education leaders, unlike that of the business culture, are not often hired from within. The business sector, on the other hand, grooms future executives as a form of their succession planning. A major reason for failure when outsiders are hired as leaders, whether in the business or education sectors, is their lack of "understanding, respecting, and fitting into the culture" (Bornstein, 2005, p. 10).

From these same survey results, only 19% of the presidents indicated they were hired internally. Yet the results demonstrate an "apparent relationship between an internal

selection and a successful presidency" (Bornstein, 2005, p. 10). This survey data present obvious opportunities for developing and preparing future academic leaders, whether presidents, deans, department chairs, etc. The long-term advantages of having individuals who have gone through some form of preparation and professional development affords institutions more possibilities of hiring qualified candidates from within. This, therefore, results in a greater chance of successful candidates filling positions based on the data that exhibit this positive relationship.

The creation of more widely available continuing education, training, and mentoring opportunities can assist in the preparation of potential candidates. While some developmental programs exist, many are short-term or one-shot events. The amount of information that is relayed in a small amount of time is enormous, and follow-up opportunities are often unavailable (Bornstein, 2005; Hornyak & Page, 2004).

Mentoring as Succession Planning

Noe (2010, p. 424) defined succession planning as "the process of identifying and developing the future leadership" of an organization. Ibarra (2006) noted this is much more than training current employees; it involves developing talent from within an organization as well as developing ways to better recruit qualified candidates outside of the organization. As noted previously, this continues to be of utmost importance given the baby boomer generation is entering or nearing retirement in all industries. Based upon Barrett & Davis's (2008, pp. 721-739) work on succession planning, there are eight predetermined steps in the succession planning process:

1. Identify what positions are included in the plan.
2. Identify the employees who are included in the plan.

3. Develop standards to evaluate positions (e.g., competencies, desired experiences, desired knowledge, developmental value).
4. Determine how employee potential will be measured (e.g., current performance and potential performance.
5. Develop the succession planning review.
6. Link the succession planning system with other human resource data and systems, including training and development, compensation, and staffing systems.
7. Determine what feedback is provided to employees.
8. Measure the effectiveness of the succession planning process.

Highly successful organizations have been able to utilize succession planning as part of their leadership development process; these organizations "focus on creating a comprehensive set of assessment and development practices that support the entire pipeline of talent across the organization" (Groves, 2007, p. 240). Rather than simply replacing employees, a long-term perspective is adopted for developing and managing talent within the organizations.

Within the process of succession planning, mentoring serves its role as well. In order to facilitate leadership development within succession planning, pervasive mentoring relationships must be developed (Groves, 2007). Formal mentoring programs can be utilized, and informal mentoring relationships can be encouraged. Once mentors and protégés have been identified, a mentor network begins to develop. This is consistent with the notion that in today's society having more than one mentor is strongly correlated with high promotion rates (Groves, 2007; Lankua & Scandura, 2002).

Cohn, Khurana, and Reeves (2005) conducted interviews with successful organizations regarding their use of or intent to develop succession planning programs. Based upon their findings, the following checklist should be followed to help groom future leaders:

- Launch a formal, high-level succession-planning conference for senior executives/administrators facilitated by HR and outside experts; outline the leadership development process; and cascade it through the organization.
- Create leadership development programs that fill holes in your organization's talent portfolio to ensure a deep bench for critical positions.
- Let HR create tools and facilitate their use, but require the organizational units/departments to own the leadership development activities.
- Have the board or governing body oversee leadership development initiatives, and insist on continual communication by senior executives/administrators on their commitment to leadership development.
- Reshuffle rising stars throughout the organization, taking care that A players are exchanged for other A players.
- Make sure that your leadership development program is aligned with your strategy, reinforces your organization's brand, and has support from your employees. (p. 7)

As the literature suggests, designing and implementing a comprehensive succession planning process is the most practical solution to meet the growing trend of retiring employees. Instead of fearing the concept of succession planning as if it

insinuates individuals' replacement, organizations need to embrace the fact that this tactic can help carry out future successes.

Developmental Alternatives to Mentoring

In addition to formal mentoring, various other means of workplace learning can be utilized to develop individuals as well, such as job assignments, coaching, 360-degree feedback, training sessions, on-the-job training, action learning, job shadowing, or self-study (Jacobs & Park, 2009; Ibarra, 2008; Groves, 2007). Job assignments can be defined as specific tasks that individuals are asked to complete in an effort to provide a specified output (Mansfield, 1996). Coaching is often referred to as the short-term education, instruction, and training that subordinates receive (Dessler, 2013). When utilizing 360-degree feedback, individuals receive feedback from multiple raters or perspectives (Lepsinger & Lucia, 1997). Training sessions provide individuals with the skills or knowledge needed (Dessler, 2013). Specifically, on-the-job training allows the learner to actually perform the job in order to acquire the skills and knowledge necessary (Dessler, 2013). Action learning provides individuals with opportunities to analyze and solve problems, oftentimes beyond the usual area of expertise (Dessler, 2013). Job shadowing is oftentimes longer term over the course of multiple visits in which an individual observes others in their roles (Hamilton & Hamilton, 1997). Self-study, on the other hand, empowers individuals to develop knowledge and skills on their own time in various manners (Dessler, 2013). While it is evident these strategies are singled out in the literature, many of these often occur to some degree within mentoring relationships.

Jacobs and Park (2009) further asserted that when analyzing developmental opportunities within workplace learning, three variables must also be understood:

location of the learning (off-the-job or on-the-job), degree of the planning (unstructured or structured), and role of the facilitator/trainer (passive or active). When considering these three variables, organizations are provided a conceptual framework of how learning can occur in an effort to continue to develop employees.

Human Resource Development in Higher Education

Higher education programs of present day are a provider of management and leadership development within the realm of human resource development. Until the late twentieth century, academics did not specifically involve the HRD field within their curriculum. Presently, acknowledgement of human resource development in higher education does occur, and many concepts of the discipline directly relate to learning and education (Swanson & Holton, 2009).

Several HRD programs at academic institutions exhibit high standards and offer commitment to the field of HRD. On the contrary, there are also academic programs that are questionable and developed solely for bringing in additional head-count and revenue. In the future, it is posited that HRD programs will be accredited like traditional educational lines of study. At the present time, HRD programs can gauge their own achievement based upon the Academy of Human Resource Development (AHRD) Academic Program Standards (Swanson & Holton, 2009). These standards focus on the following seven areas:

1. Program Purpose
2. Faculty
3. Curriculum
4. Students

5. Research
6. Resources
7. Leadership and Support

As can be seen, HRD practitioners have found themselves at the intersection of education and work-based programs. Thus, this has spurred the growth of many corporate education programs in addition to academic programs. Within both settings, organizations are seeking to provide training and development to their employees for specific concepts, as well as for further leadership development for current employees to capitalize on critical human resources. Such training and development relates to mentoring opportunities and instances where further professional development of aspiring leaders can result in the higher education setting. As Kellie (2007) wrote, there is a "consensus that the quality of an organization's human resources represents a critical success factor and that HRD has a significant role to play in this" (p. 130). Higher education shows improvement in accepting this notion often characterizing it as professional development.

What is Leadership Development?

Leadership development has been defined as "expanding the collective capacity of organizational members to engage effectively in leadership roles and processes" (Day, 1999, p. 68). Leadership development activities have been classified in several manners. Bush and Glover (2004) identified scientific, humanist, and pragmatic approaches. Muijs et al. (2006) identified a typology including course-based, individual, and experiential leadership development. Because this typology has offered specific examples, this study was based on these classifications.

Leadership development programs first saw potential and grew in business and industry as part of career development efforts. Since then, because of their effectiveness and ability to gather commitment from participants, higher education has also started to take part (Hornyak & Page, 2004). Developing leadership from within has become a more critical strategy in many disciplines. And because higher education continues to experience such drastic changes, having individuals who are more readily prepared and apt to be active participants results in a driving force for experimentation with various forms of leadership development. Even with this identified push for leadership development to occur, Bush and Glover (2004) indicated in their research that the actual effect of leadership development on leadership practices has yet to be thoroughly scrutinized. This results in an additional need of comparative research studying mentoring functions as a means of leadership development.

Models of Career Development

As defined by Noe (2010, p. 455), "career development is the process by which employees progress through a series of stages, each characterized by a different set of developmental tasks, activities, and relationships." While many career development models do exist, the career stage model (see Table 1) utilized by Noe (2010) helps characterize developmental tasks, activities, and relationships on the job.

Table 1
Noe's Model of Career Development

	Career Stage	Establishment	Maintenance	Disengagement
Developmental Tasks	Identify interests, skills, fit between self and work	Advancement, growth, security, develop lifestyle	Hold on to accomplishments, update skills	Retirement planning, change balance between work and nonwork
Activities	Helping Learning Following directions	Making independent contributions	Training Sponsoring Policy making	Phasing out of work
Relationships to Other Employees	Apprentice	Colleague	Mentor	Sponsor
Typical Age	Less than 30	30-45	45-60	61+
Years on the Job	Less than 2 years	2-10 years	More than 10 years	More than 10 years

Schein (1990) also provided a model of career development based upon his insight into Super's seminal work regarding stages of the typical career. As he wrote, individuals view careers as "several meaningful units or stages that are recognized both by the person and by society" (p. 10). Much of Schein's work also centered on the concept of a career anchor, "the one element in a person's self-concept that he or she will not give up, even in the face of difficult choices" (1990, p. 18). Essentially, research showed when individuals had jobs that were not the best fit, the idea of being "pulled back" to something with a better fit continued to surface, thus resulting in the metaphor of an anchor. From the longitudinal study and various career history interviews, research resulted in eight anchors being identified, each with their own descriptors regarding type of work, pay and benefits, promotion system, and type of recognition:

- Technical/Functional Competence
- General Managerial Competence

- Autonomy/Independence
- Security/Stability
- Entrepreneurial Creativity
- Service/Dedication to a Cause
- Pure Challenge
- Lifestyle (1990, p. 20).

Career development within the HRD realm originally involved both the organization and the individual. Presently, the view is slightly different due to the notion that long-term careers with a specific organization are not overly common, and individuals themselves are highly responsible for their own career development (Swanson & Holton, 2009).

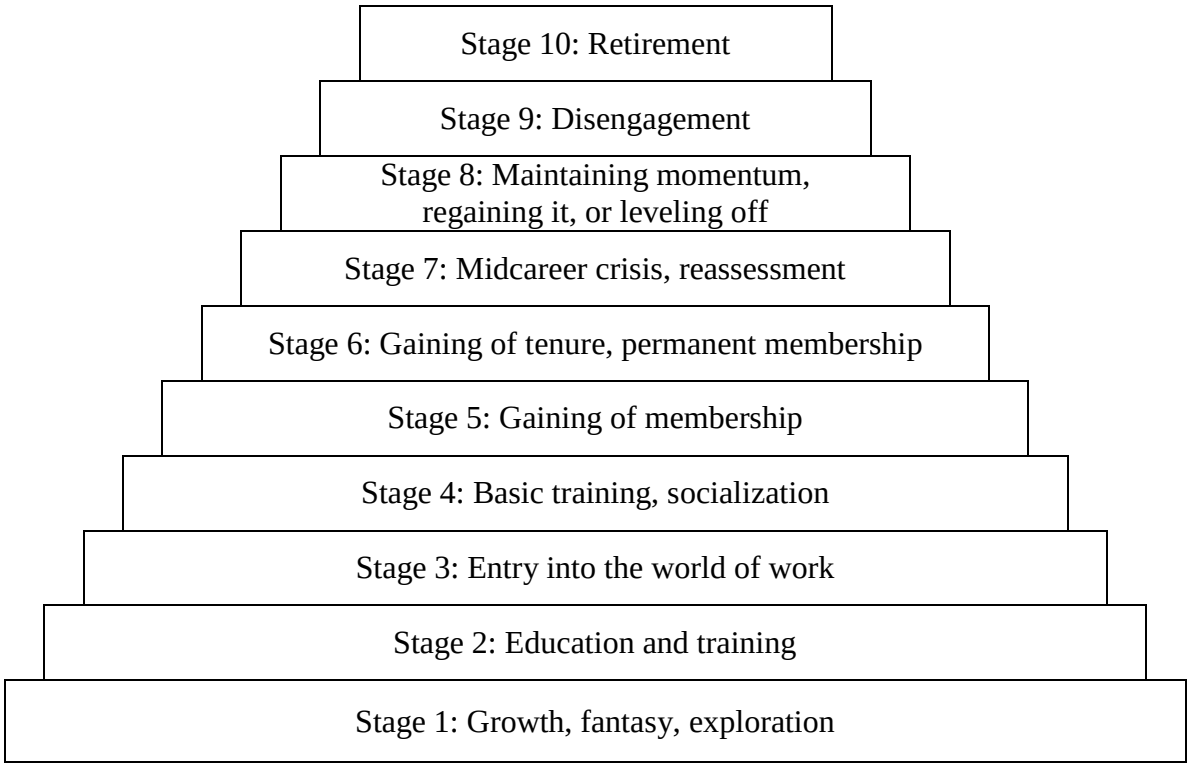
As such, individuals are now in charge of their own protean career, or "a career based on self-direction in the pursuit of psychological success in one's work" (Hall, 2002, p. 23). Even though this type of new career contract requires individuals to be self-directed, organizations can still help to facilitate the career development of their employees to some extent. Hall (2002) provided 10 steps to promoting successful protean careers (p. 43).

1. Start with the recognition that the individual "owns" the career.
2. Create information and support for the individual's own development efforts.
3. Recognize that career development is a relational process; the organization and career practitioner play a broker role.
4. Integrate career information, assessment technology, career coaching, and consulting.

5. Provide excellent career communication.
6. Promote work planning; discourage career planning.
7. Focus on relationships and work challenges for development.
8. Provide career interventions aimed at work challenge and relationships.
9. Favor the learner identity over job mastery.
10. Develop the mindset of using "natural resources for development."

No matter the case, traditional versus protean career, career stages can still be viewed the same; they can occur within one organization or within many. As such, the 10 major stages as Schein described them are shown in Figure 1.

Figure 1. Schein's 10 Career Stages



As can be seen from Figure 1, somewhat of an internal timetable is provided for individuals while going through their career(s). Stages for each individual may vary in

length of time, and one must remember that age does not necessarily correlate with each stage being reached.

Many facets of mentoring apply to these stages of career development. For example, exploration may occur because of a mentor meeting with a protégé regarding career interests. Mentoring often plays a major role within the concept of socialization as well. Throughout a career, each stage may take more or less time, and each may be repeated if career paths are altered at any time. In any case, mentoring practices may be present.

Promotion and Tenure within Higher Education as Career Development

Promotion and tenure in higher education constitute one traditional path of career development. Achieving higher ranks via promotion and earning tenure status continues to be an ultimate goal within many institutions. Many have identified promotion and tenure as a primary measure of a faculty member's socialization within an institution. Ironically enough, this socialization or adapting to the organization often involves much stress, low satisfaction, and, at best, is quite the challenge (Schrodt, Cawyer, & Sanders, 2003).

Furthermore, it has been shown in research that individuals with mentors receive more promotions (Dreher & Ash, 1990). The gatekeepers of information, often the mentors, help guide the protégés through "that infamous right of passage known as the process of 'Tenure and Promotion'" (Alexander, 1992, p. 55).

An alternate route to obtain promotion and tenure involves sabbaticals. Some faculty choose to utilize sabbaticals to partake in extra research or writing grants in hopes of earning promotion and/or tenure. However, one of the most significant reasons that

more individuals do not choose this path is the time pressure and constraints of achieving and earning promotion and/or tenure given the institutional guidelines. Ultimately, faculty must weigh the pros and cons if a sabbatical is appropriate for their career development path (Baker, Wysocki, House, & Batista, 2008).

As faculty hope for the opportunity for promotion and/or tenure, higher education institutions strive to employ faculty who teach exceptionally, research timelessly, and also serve the campus community suitably. With both parties having aspirations to be met, both essentially enter into what is known in career development as a psychological contract. According to Hall (2002), Schein believed the psychological contract to be "the foundation for the employment arrangement in that the continuation of the relationship, as well as the employee's rewards and contributions, depends on the degree to which the mutual expectations are met" (p. 18). Noe (2010) simplified it by stating a psychological contract "refers to the expectations that employers and employees have about each other" (p. 450).

While the concept of a traditional psychological contract appears straightforward, over the years, these terms have changed in many industries, especially in business. Reasons cited for this include changes in organizational structure, increased competition, and globalization. Higher education has recently been seeing more of a shift as well. Rather than traditional careers, protean careers are becoming more and more common. Table 2 helps to delineate the two types of careers (Noe, 2010, p. 450).

Table 2
Comparison of Traditional Career and Protean Career

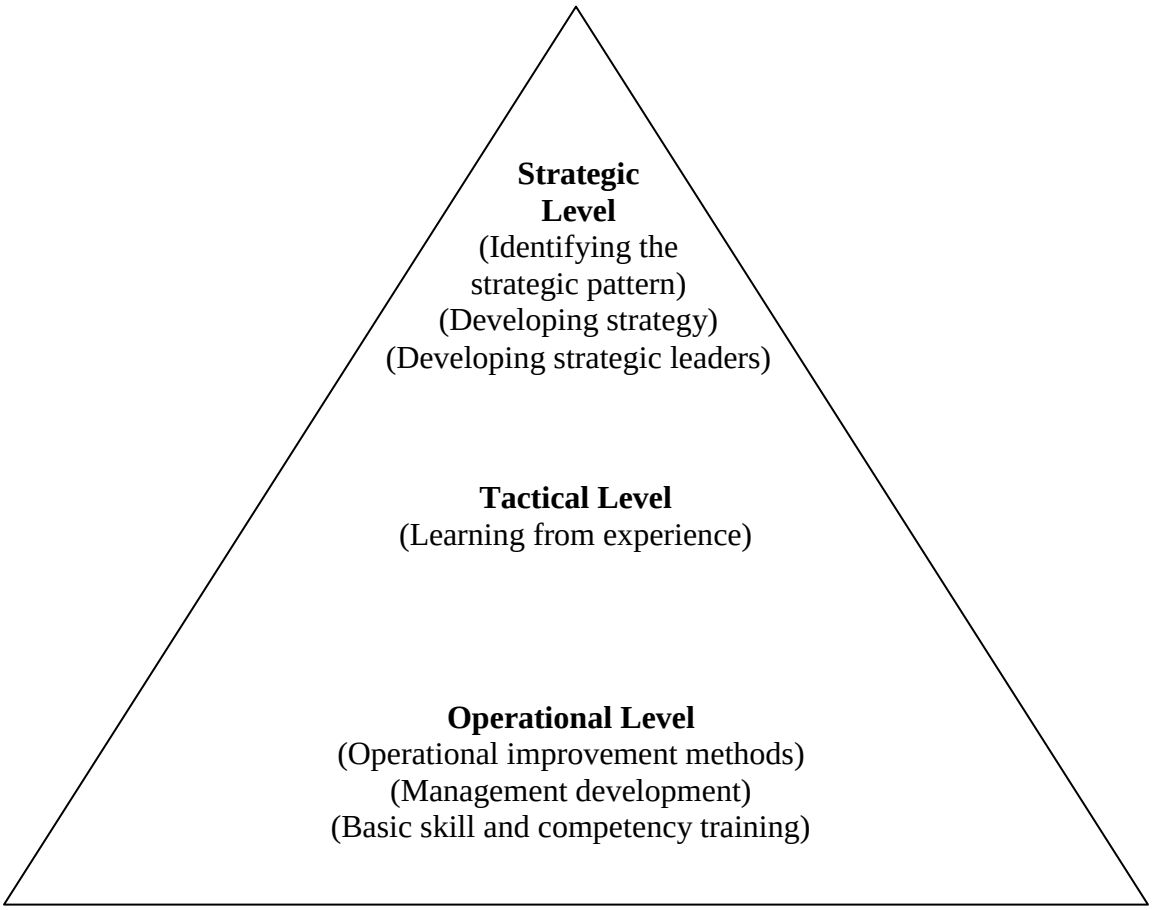
Dimension	Traditional Career	Protean Career
Goal	Promotions; Salary increase	Psychological success
Psychological Contract	Security for commitment	Employability for flexibility
Mobility	Vertical	Lateral
Management Responsibility	Company	Employee
Pattern	Linear and expert	Spiral and transitory
Expertise	Know how	Learn how
Development	Heavy reliance on formal training	Greater reliance on relationships and job experiences

Because of this identified shift, higher education faculty will likely continue to utilize alternative means of development in an effort to further their careers. Sabbaticals, instead of focusing on research for the current employing institution, may serve as a means for obtaining employment at a future institution. And, as has been seen in many institutions, the employers may limit the opportunity for tenure-track positions. Both parties are hedging the future based on the current push for protean careers.

Strategic Human Resource Development in Higher Education

Planning for the future, often considered a function within HRD, involves strategic thinking. As such, the concept of strategic human resource development has received increased attention. Yorks (2005) posited there are three levels to the HRD pyramid: operational level, tactical level, and strategic level. Figure 2 helps to better describe each level (Yorks, 2005, p. 28).

Figure 2. HRD Pyramid



Strategic human resource development (SHRD) is defined as a "coherent, vertically aligned and horizontally integrated set of learning and development activities which contribute to the achievement of strategic goals" (Garavan, 2007, p. 25). Torraco and Swanson (1995) further noted the importance of HRD and its relation to strategy: "Today's business environment requires that HRD not only supports the business strategies of organizations, but that it assumes a pivotal role in the shaping of business strategy" (p. 10).

Torraco and Swanson (1995) asserted "people are the only organizational resource that can shape and create the ways in which all other business resources are used" (p. 18). Employees can be considered an organization's greatest asset. With this

being very much the case in higher education, SHRD also shapes the future of educational institutions. Within the implementation of SHRD in higher education, mentoring can provide essential sharing of knowledge and skills among the employees. Long-term success of educational institutions may very well depend upon implementation and execution of such SHRD initiatives.

Blackwell and Blackmore (2003) stated that within the higher education setting, a learning culture is created through "mutual and reciprocal relationships between strategic staff development and corporate strategy" (p. 5). This thought complements Yorks' pyramid where leadership development occurs at the strategic level of HRD. In light of this, higher education institutions have shifted their focus toward establishing shared vision, values, and goals, rather than only focusing on traditional control and planning. Such a shift aligns with the first characteristic distinguishing SHRD: Relationship to organizational goals (Blackwell & Blackmore, 2003; McCracken & Wallace, 2000).

Understanding Mentoring Functions Within Leadership Development

Realizing that the career development and psychosocial mentoring functions exist in some form as part of experiential leadership development, a model can be proposed to depict the conceptual relationship that occurs. The Hypothetical Conceptual Model of Mentoring Functions within Leadership Development (see Appendix K) demonstrates the components of leadership development and where mentoring actually exists. The two functions (see Psychosocial Functions and Career Development Functions in Appendix K) of mentoring are further broken down within this model and the arrows connecting each to their respective functions demonstrate possible linkages of how "strong" or "weak" their application to leadership development may be. The dissertation study helps

to further assess these relationships. The thicker the arrow, the stronger their utilization and perceived benefit to an individual's leadership development; the thinner the arrow, the weaker the application and perceived benefit to an individual's leadership development. This portion of the model is what provides an obvious opportunity for further testing or validation. Specifically, this portion of the model provided an opportunity post-data collection to compare and contrast the proposed model with the data gathered. Thus, the hypothesized model (see Appendix K) was developed prior to the data collection and analysis. After data collection and analysis, the Proposed Conceptual Model of Mentoring Functions within Leadership Development was developed based upon this study (see Appendix L).

To further describe the model, the dotted bi-directional arrows connecting mentoring functions and leadership development represent the proposed relation being addressed in this study. They are bi-directional to represent the cyclical and continuous relationship mentoring and leadership development are proposed to have. Those serving as mentors will be passing knowledge and experience 'down' the arrow to the protégés, yet as the mentoring process takes place, knowledge and experiences will be transferred 'up' the arrow as well. Mentoring, as confirmed by much of the literature, is a process that benefits both protégés and mentors.

This model is specifically supporting the relationship and typology addressed by Muijs et al. (2006). Conceptualizing leadership development at the top of the model, the typology identified three main types of leadership development that are then below: experiential, individual, and course-based. Again, based upon the specific examples provided by Muijs et al. (2006), the boxes below the three types of leadership

development are then included in the model. Directly related to this study is the concept of mentoring. This box has the text in bold as that is the focus of research that was addressed in this model. Continuing below the various examples of the three types of leadership development, specifically the box labeled “mentoring,” the functions of mentoring are individually listed. The two functions are those discussed in detail for this study: career development functions and psychosocial functions. Finally, each specific function is then identified in the bottom nine boxes. Essentially, one can consider the concept of leadership development and all various aspects that contribute to this, and then conceptualize how each aspect may directly relate to and affect one’s leadership development. This study specifically examined mentoring functions, as a form of experiential leadership development, and their relation to leadership development in general.

Hypothetical examples demonstrated by the pre-research model show possible results how each of the nine mentoring functions, as a form of experiential leadership development, relate to overall leadership development. As depicted by this model, it was hypothesized that the functions most utilized and perceived as the most beneficial include role modeling, counseling, coaching, challenging assignments, and exposure-and visibility. This assumption primarily occurred because of the nature of these functions (Mertz, 2004; Noe, 1988; Kram, 1988; Kram, 1985). They are more likely to be provided from the onset of the mentoring relationship, and the duration tends to be quite lengthy and intense. Thus, the model includes heavier, or thicker, lines connecting each of these functions in comparison to the others.

The remaining functions, such as acceptance-and-confirmation, friendship, sponsorship, and protection are hypothesized to be more behind-the-scenes throughout the mentoring relationship. As such, they were not hypothesized to be as heavily utilized or as highly beneficial to the overall leadership development. Consequently, the lines connecting these mentoring functions to the model are thinner in comparison to the others. To further validate the model, the researcher connected each of the nine mentoring functions with the appropriate heaviness or thickness of a line once this study was completed. The original model and lines were assumptions based upon the literature. Continued validation in the future can complete the cycle of how mentoring functions relate back to leadership development.

CHAPTER 3: METHODOLOGY AND DESIGN

Chapter three presents the design, methods, and procedures of this mixed methods study. The chapter is divided into five main sections: design of the study, samples and permissions, instrumentation, data collection procedures, and data analysis procedures. Ethical considerations and the researcher's resources and skills are also discussed. The Institutional Review Board at the University of Nebraska-Lincoln was asked to grant permission for the researcher to conduct this study (see Appendix A).

Design of the Study

Two major procedures of study are typically identified by researchers: quantitative study and qualitative study (Creswell, 2003). Simply stated, quantitative research is often viewed as including numbers, measures, and analysis based upon sampling theory. On the other hand, qualitative research involves all other non-number data, such as text and conversations, images, observations, etc. Combining these two, or mixing them together, results in what many view as complex, difficult and innovative research (Gorard, 2010). Some studies, however, necessitate this. It is research that looks "for answers beyond simple numbers in a quantitative sense or words in a qualitative sense. A combination of both forms of data can provide the most complete analysis of problems" (Creswell & Plano Clark, 2007, p. 13). Therefore, the design of this study was a mixed methods approach using both quantitative and qualitative approaches.

> Mixed methods research is a research design with a methodology and methods. As a methodology, it involves collecting, analyzing, and mixing qualitative and quantitative approaches at many phases in the research process, from the initial philosophical assumptions to the drawing of conclusions. As a method, it focuses

on collecting, analyzing, and mixing quantitative and qualitative data in a single study or series of studies. (Creswell & Plano Clark, 2007, p. 18)

Greene (2007) provides an additional brief definition of mixed methods research. She states, it is the "intentional use of more than one method, methodology, and/or methodological tradition in the same study or program of research" (p. 257). She further comments that mixed methods research and supporting the various possibilities has been her "own intellectual journey" (p. 259).

It is important to revisit the worldview that was utilized within this research study. The general philosophy engaged in this research was pragmatism. Pragmatism is often the paradigm or worldview of choice when conducting mixed methods research. "It draws on many ideas, including employing 'what works', using diverse approaches, and valuing both objective and subjective knowledge" (Creswell & Plano Clark, 2007, p. 26). Tashakkori and Teddlie (2009) write that pragmatism is the obvious partner for mixed methods research because it "offers a third choice that embraces superordinate ideas gleaned through consideration of perspectives from both sides of the paradigms debate in interaction with the research question and real-world circumstances" (p. 73).

When designing a mixed methods research study, three issues come to the forefront: priority, implementation, and integration (Creswell, Plano Clark, Guttman, & Hanson, 2003; Johnson & Gray, 2010). Priority refers to the method, either quantitative or qualitative, which is given more weight in the study. Implementation refers to the sequence of data collection. Quantitative and qualitative data collection and analysis can occur simultaneously or in chronological stages. Finally, integration occurs when the mixing or connecting of quantitative and qualitative takes place.

For the purpose of this study, the researcher employed a Sequential Explanatory Design: Follow-up Explanations Study (see Appendix B). This type of study was used to gain additional information beyond that acquired from the quantitative phase alone. “In this model, the researcher identifies specific quantitative findings that need additional explanation, such as statistical differences among groups, individuals who scored at extreme levels, or unexpected results” (Creswell & Plano Clark, 2007, p. 72). In terms of the design, the quantitative data was weighted more heavily, and data was connected, or mixed, based upon the initial quantitative data that led to the future selection, or inclusion, of follow-up interviews for more details.

This study lent itself to the sequential explanatory mixed methods format. It was appropriate because the researcher was looking to further explain data that was obtained in a quantitative manner. Much still needs to be learned regarding the use and application of specific mentoring functions in formal mentoring programs designed for higher education leaders. Therefore, with no known results, it was an extremely useful format to gather data. Qualitative follow-up interviews helped to flesh out deeper details that the quantitative survey revealed (Plano Clark & Creswell, 2008).

According to Creswell (2007), there are many advantages to this explanatory design:

- The two-phase structure is fairly straightforward as the two methods of data collection occur in separate phases; the research can be written up in a straightforward manner as well because of two distinct phases of data collection.

- The explanatory design is applicable for both multiphase investigations and single mixed methods studies.
- This design appeals to quantitative researchers because of the first strong phase of quantitative data collection.

Along with the strengths, Creswell (2007) also notes a few challenges associated with this structure:

- The time necessary for implementing both distinct phases can become quite lengthy.
- The researcher must carefully consider who the participants are for each of the phases.
- It can be difficult to obtain Institutional Review Board (IRB) approval for this design type due to the difficulty in describing the second phase in full detail when it depends on data being collected from the first phase.

Such challenges do tend to present themselves in research; however, the researcher had extended amounts of time devoted to the research, thus minimizing the first challenge. In addition, the selection of participants is critical in any research, and the decision for this study was not taken lightly, limiting the second challenge. Finally, the IRB approval was possible due to extensive communication and follow-up between the researcher, her committee, the Director of the ACE Fellows program, and the IRB office throughout the research process. Doing so helped to eliminate the final challenge for this type of research.

Samples and Permissions

When selecting participants for this study, the researcher received much input from her committee and her own research into the topic. One key recommendation provided insight into a very viable option for a research population: the American Council on Education (ACE) Fellow's Program. ACE's Fellows Program is considered the most successful mentoring program that "places aspiring institutional leaders in on-site internships with experienced senior administrators" (Bornstein, 2005, p. 11). It is known as the nation's premier leadership development program for those in higher education. As such, this type of program matched the researcher's interest and desire to learn more about mentoring functions and their use and benefit within higher education leadership development programs.

Quantitative Sample

The sample for the quantitative phase was based on the population of former participants in the ACE Fellows Program. The target population took into account individuals who received formal mentoring as part of their own personal quest to develop their higher education leadership skills. Having this target population identified led to the sample being determined. According to ACE Fellows Program statistics, the total number of Fellows who have ever participated in the program is 1,698 (ACE Names 46 Faculty, 2010).

The American Council on Education was asked for permission for the researcher to gather data on their Fellows. When the researcher reached the Director of the ACE Fellows program, they discussed the option to conduct such a study. After further discussion via phone and email, the Director of the ACE Fellows Program agreed to

provide the researcher with access to survey three random classes for the quantitative phase. A random number generator, accessed via the internet, was utilized to determine three classes, and the following class groups were provided: 2001-2002, 2006-2007, and 2009-2010. This resulted in 116 former ACE Fellows potentially receiving the survey (see Table 3). Not all relevant demographic data is depicted in Table 3. For example, the research study provided evidence of Fellows employed at public institutions as well. As discussed with the Director of the ACE Fellows program, it was difficult to reach all individuals as some have not maintained up-to-date contact information, some have passed on, and others have participated in additional research that the Director preferred to not have overlap at the time of this research. As such, there was an end result of 98 email addresses being usable for this quantitative research portion. Individuals who provided responses to the quantitative portion of the research project gave consent to the researcher of their participation in the study by submitting their survey.

Table 3
Demographic Data of Sample Population

Class	Class Size	# Women	# Men	# Minorities	# Community Colleges	# Private Colleges
2001-2	34	16	18	11	2	12
2006-7	40	23	17	21	4	8
2009-10	42	27	15	18	3	31
Totals:	116	66	50	50	9	51

Qualitative Sample

The sample for the qualitative phase was purposively selected from respondents who agreed to potentially participate in the second phase of the study by voluntarily providing their contact information. Based upon the results, typical sampling or deviant

sampling best suited the research. Qualitative studies typically use purposive sampling techniques because specific individuals or cases are selected based upon their purpose associated with answering the research question(s) (Teddlie & Tashakkori, 2009). "Purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (Merriam, 1998, p. 61).

Various purposive sampling strategies were considered, and for this research, those within the Sampling to Achieve Representatives or Comparability (see Table 4) were most applicable (Teddlie & Tashakkori, 2009, p. 174):

Table 4
A Typology of Purposive Sampling Strategies

Sampling to Achieve Representatives or Comparability	
1.	Typical case sampling
2.	Extreme or deviant case sampling
3.	Intensity sampling
4.	Maximum variation sampling
5.	Homogeneous sampling
6.	Reputational case sampling

For the purpose of this study, the researcher sought to further explain results gathered from the first quantitative phase. Therefore, nine individuals were asked for their informed consent. Interviewing nine individuals provided a reasonable sample for this phase of the investigation as it represented nearly 10% of those surveyed. Based upon discussion with the ACE Fellows Director, this constituted a representative sample for gathering additional details and provided rich data that was desired, and most likely content saturation would be reached at this point.

Instrumentation

Quantitative Survey

A review of the current literature revealed no appropriate instrument for use in identifying utilization and benefit of career development and psychosocial mentoring functions as they related to leadership development. An original survey instrument (see Appendix G) was developed to collect data from ACE Fellows concerning their level of use and degree of benefit from mentoring functions employed over the course of their Fellowships. Each question in the survey was designed specifically to collect data regarding one variable of interest in this study.

The researcher sought expert advice and opinions when developing the survey. Various small informal discussion sessions were held with individuals specializing in the research areas of mentoring and leadership development in higher education. The researcher's dissertation committee also had direct input with regard to questions and formatting of the survey. As a result, the instrument questions were originally developed and not duplicated from prior research.

The survey instrument—"Mentoring Functions and their Application to the ACE Fellows" (see Appendix G)—consisted of three main sections. Section I consisted of Likert-scale questions assessing the level of utilization and degree of benefit for career development mentoring functions. These questions were measured on a 5-point scale. Section II was very similar in format, except it sought input regarding the psychosocial mentoring functions. Finally, Section III concluded the survey with demographic and other relevant categorical data.

The survey organization took into account Dillman's (2009) well-known work and his recommendation to place demographic data at the end of a survey. His rationale is that once participants have invested time in answering the more appealing and relevant questions, survey respondents are more likely to continue and complete the more ordinary (demographic) questions.

Survey questions were formatted to achieve responses that garnered information for the original research questions. Specifically, Likert-type questions were helpful when trying to obtain the survey participant's position on a certain issue. While qualitative questions could obtain results as well, the researcher foresaw utilizing the Likert questions in an effort to readily compare more quantitative data (Alreck & Settle, 2004).

The survey questionnaire was web-based and accessed through the link that was included within the email communication. The sample population, representative of the target population, all received this email. An advantage of utilizing the web-based survey was the ease of data storage in a database that could seamlessly be transformed into numerical data in Excel or SPSS. Participants in the study were made aware of the informed consent measures taken by the researcher. Ultimately, the sample was informed that completing and submitting their survey expressed their agreement to be part of the research study.

Qualitative Interviews

For the qualitative guided interview portion, a tentative list of semi-structured, open-ended questions was utilized (see Appendix J). This portion of the study focused on explaining the results that were received from the statistical data during the first quantitative phase. The guided interviews were a bit more structured, the interview was

scheduled, and the interviewer was prepared with a list of topics or questions. According to Marshall and Rossman (2011), this is the most typical type of interview utilized in qualitative portions of studies. Having the guide helped to ensure that each individual interview covered substantially the same topics, yet still allowed for some flexibility along the way. Typical interview guides utilized for semi-structured interviews often have fewer than 20 questions, sometimes even less than 10 (Remler & Van Ryzin, 2011). Along with the tentative topics or questions that were prepared, it was also crucial for the interviewer to partake in asking follow-up, elaborating questions. It is argued "that the richness of an interview is heavily dependent on these follow-up questions (often called, quite infelicitously, 'probes')" (Marshall & Rossman, 2011, p. 145).

Interviews offer some inherent benefits to researchers (Marshall & Rossman, 2011; Roulston, 2010). They produce much data quickly. The researcher also had the opportunity for immediate follow-up or clarification. Since these interviews utilized audio recording, the researcher additionally had the chance to listen to responses multiple times. This also aided in the transcription of the data.

Data Collection Procedures

Effectively implementing mixed methods research requires extensive planning. Before the full research study occurred, the researcher conducted pretesting to gain initial feedback regarding the data collection instruments. In order to pretest the survey, the researcher sought assistance from colleagues who have experience in survey research. The proposed survey was emailed as a link just as the ACE Fellows would receive it. In addition, additional colleagues were asked for their insight on follow-up interview questions. Doing pretesting was crucial to ensure content validity and reliability.

Based upon the pretesting, only minor revisions were necessary. A few diction items were clarified, and minor grammatical issues were addressed on the survey. In addition, the ratings were adjusted for accuracy. For example, the original survey instrument did not allow participants to respond “N/A (not utilized)” for the questions regarding their perception of benefit received. This inaccuracy was later corrected. As for the qualitative interviews, no revisions were made based upon feedback received.

Once the pretesting was complete and any necessary revisions were made, the researcher continued with the full-fledged research study. Because the Director of the ACE Fellows Program was in support of the researcher gaining insight from the Fellows Program, it was beneficial for her to send the selected sample some form of communication indicating her encouragement of their participation (see Appendix C). This letter of support played a vital role in garnering assistance from the Fellows who were sought to participate.

Quantitative Data Collection

For the quantitative portion of the study, an e-mail cover letter (see Appendix D) was sent to each participant to inform them of the study and the contents of the survey. The survey (see Appendix G) was an attachment as a link to the e-mail cover letter. A survey instrument was ideal for the first phase of this research because it allowed the researcher to collect a large amount of data from geographically separated individuals spread across the United States, and some individuals were even located internationally (Dillman, 2009). More specifically, this study employed a web-based survey data collection process. As Dillman (2009) posits regarding web-based surveys, the task of participants accessing

the survey must be made easy and comfortable. Adhering to various guidelines that Dillman (2009) provides aided in having the highest response rate possible:

- Personalized contact to respondents
- Used multiple contacts
- Carefully considered the timing of contact with participants
- Made certain email messages were short and to the point
- Worked to ensure email messages were not considered “spam”
- Vigilantly considered subject line text for email communications
- Provided clear and concise instructions for the participants
- Knew and respected any limitations of the web server
- Established means for handling bounced email messages
- Was prepared to deal with respondent inquiries
- Was systematic with monitoring progress and evaluating results

A week prior to the survey being sent to the participants, they received communication of support from the ACE Fellows Director indicating the importance of the study. This helped to alleviate a low response rate, which is fairly typical of web-based surveys. To solicit a relatively high response rate and lower the response rate error, a three-phase follow-up sequence was utilized (Dillman, 2000). For the individuals who had not responded by the set date (1) one week after distributing the web-based survey, an email reminder was sent out; (2) two weeks later, the second email reminder was sent to individuals who had yet to respond; and (3) three weeks later, the third and final email was sent reiterating the importance of the participant’s input for the study. Table 5 helps to clarify the schedule of communication.

Table 5
Summary of Quantitative Contacts for Data Collection

Contact	Method	Timing
Communication of Support	Email	Day 1
Email and Survey Link	Email	Day 8
Reminder/Thank You 1	Email	Day 15
Reminder/Thank You 2	Email	Day 22
Reminder/Final Thank You	Email	Day 29

Within this first stage of research, each participant was asked to identify which mentoring functions were utilized and which were perceived to beneficially contribute to his/her leadership development within higher education. Responses were returned via the survey link within a specified timeframe after the participants received the survey. Submission of the survey implied consent. To remind participants of the survey, a follow-up e-mail (Appendix E & F) was sent, again with the survey link attached. This occurred three times, and each was personally sent by the ACE Fellows Director.

The survey was hosted on a secure website, surveymonkey.com. This site, for a small fee, offered many features suitable for the researcher including the opportunity to include an unlimited number of survey questions, open-ended text boxes and text analysis, result filtering, and the capability to export data for statistical analysis. Surveymonkey.com also provided high levels of security including the option to turn on SSL (Secure Sockets Layers) to utilize data encryption and provide data protection.

During this study, participant identification was kept confidential. Only the researcher had access to any identifying data via the website. This information was only used for tracking respondents in the case that a follow-up interview was conducted. These measures also ensured that duplicate or fictitious data did not result in biased outcomes. The records of these data were kept by the primary researcher until the surveys were

completed. The data collected from the survey were later transferred to SPSS for Windows for data analysis.

Table 6
Research Questions/Survey Crosswalk Table

Survey Questions	Quantitative Research Questions 1	2	3	4
1-2				
3	X			
4		X		
5			X	
6				X
7-13				

Reliability and validity of the quantitative survey was ensured in various manners. Prior to embarking on the full-fledged research study, the researcher conducted pretesting of the survey instrument. Based upon the feedback and data collection from the pretest, the internal reliability of the instrument was assessed. The reliability of the Likert-scale questions were analyzed with the use of Cronbach's alpha. "When using Likert-type scales it is imperative to calculate and report Cronbach's alpha coefficient for internal consistency reliability for any scales or subscales one may be using" (Gliem & Gliem, 2003, p. 88). Cronbach's alpha has a value that ranges from 0 to 1. The closer the value of alpha is to 1, the more reliable the measure. The value of alpha should range from .70 to 1.00 (Jackson, 2003). The reliability analyses of the instrument conducted during the pretest provided values at or above .75, indicating the instrument was found to be reliable. The alpha value for Question 3 (utilization of career development functions) was .75; the alpha value for Question 4 (benefit of career development functions) was .89; the alpha value for Question 5 (utilization of psychosocial functions) was .78; and, the alpha value for Question 6 (benefit of psychosocial functions) was .89.

In addition, the aforementioned crosswalk table (see Table 6) provided demonstration that the questions asked on the survey were specifically regarding concepts measured, and *only* those measured. The survey instrument was free of any extraneous factors, other than basic demographic data, that may have skewed the results (Alreck & Settle, 2004). The use of pretesting with colleagues helped to ensure clear content and instructions within the survey design. Survey design errors and response biases, as instructed by Dillman (2009), were minimized in this study to increase validity and reliability.

Qualitative Data Collection

Based upon the survey results, follow-up open-ended, guided interviews were conducted. Interviews were sought from nine individuals who had volunteered to participate in follow-up communication. Once email communication was made with follow-up candidates (see Appendix H), approval was obtained from nine individuals selected to participate in the interviews. When initial approval of each participant was obtained, an email was sent to the participants, including an Informed Consent Form approved by the University of Nebraska-Lincoln Institutional Review Board (see Appendix I). This correspondence reiterated how anonymity and confidentiality issues would be handled. No individual or institutional names were shared. Appointments, via telephone, were scheduled directly with the confirmed participants. Interviews lasted between 35 to 60 minutes each.

These guided interviews took on a semi-structured, open-ended format allowing for rich qualitative data adding meaning to data that has been acquired quantitatively. Stake (1995) notes the validity of conducting interviews: "…each interviewee is expected

to have had unique experiences, special stories to tell" (p. 65). Interviews were audio-recorded to allow for later transcription by the researcher. Even being fortunate enough to have participants agree to be recorded, transcription could still provide the researcher with many challenges (Marshall & Rossman, 2011). Having the entire encounter recorded does not equate to seamlessly transcribing the data. To counteract any chance of misinterpretation, the researcher employed the strategy of sharing the transcriptions with the interview participants for their confirmation, referred to as member-checking.

Notes were also taken by the researcher throughout the interview to aid in recollection of any tonal cues during the interview. These cues are otherwise lost when only audio-recorded. These interviews provided the major source of qualitative data for purposes of addressing the research questions. Open-ended questions were utilized to avoid questions that could be answered "yes" or "no" (see Appendix J). A semi-structured format allowed for additional questions to be asked which provided further details or clarification.

Table 7
Research Questions/Interview Crosswalk Table

Interview Questions	Qualitative/Mixed Methods Research Questions		
	5	6	7
1-2			X
3-7	X		
8-11		X	
12-14			X

Credibility and reliability of the qualitative interviews was ensured in various manners as well. Different from traditional validity measures in quantitative studies, credibility through verification was sought to enhance believability, insight, instrumental utility, and trustworthiness (Eisner, 1991; Lincoln & Guba, 1985). Having established the

credibility of the study allows the opportunity for the study to be replicated in further settings (Creswell, 2007).

In an effort to assure credibility, or validate the findings, four primary means were employed: (a) triangulation, or providing corroborating evidence from various sources of information; (b) member checking, or obtaining feedback from the participants regarding the accuracy of the findings and interpretations; (c) rich, thick description to allow for transferability to other research settings; and, (d) external audit, an effort which allowed an external consultant to examine the process and end result to assess and ensure accuracy (Creswell, 2007). This external consultant was a colleague of the researcher with an advanced degree in both quantitative and qualitative research methods; this individual assessed the data that was collected with analysis conducted by the researcher to ensure consistency.

Furthermore, reliability was addressed by the researcher when taking detailed notes, using high-quality recording equipment, and providing comprehensive transcription. In addition, the aforementioned crosswalk table (see Table 7) provided demonstration that the questions asked within the interviews were specific to what was being sought for detailed description within the research questions.

Data Analysis Procedures

Quantitative Data Analysis

The quantitative research questions were analyzed using statistical software (SPSS). Questions were analyzed individually. In an effort to avoid biasing participants' answers, they were required to respond to all questions. The statistical data has been conducted, analyzed, and reported for each question.

A descriptive analysis was conducted to determine any general trends and report central tendency and variability. Descriptive statistics allowed the researcher to summarize overall tendencies and give information of how single scores compared to others, in addition to assessing how representative the sample was of the population (Creswell, 2009). In addition, the use of like-valued Likert scales for the two variables allowed for the researcher to determine the Pearson correlation between the degree of utilization of the mentoring functions and the degree of benefit perceived. The Pearson correlation "measures the degree and direction of linear relationship between two variables" (Gravetter & Wallnau, 2007, p. 511). As previously discussed, content validity was ensured by the initial discussions, pretesting, and committee review.

Because the survey also contained some opportunities for respondents to comment within text boxes, some additional data analysis needed to occur. The text was not as in-depth as what interviews provided, thus the researcher was able to manually analyze and assess this content with the assistance of the text analysis feature provided within surveymonkey.com, as well as utilize qualitative analysis provided through SPSS. As such, any relevant data that emerged from assessing the data were reported and aided in guiding the second-phase interviews to probe for more specific information.

Qualitative Data Analysis

It was estimated that nine individuals would complete the second phase of this mixed-methods study. The researcher suggested this would be enough participants, approximately 10% of those surveyed, to achieve detailed information to further expand upon the first-phase survey. To some degree, the researcher ensured the content derived from the participants reached content saturation. As discussed prior, upon conclusion of

the interviews and upon completion of transcription, qualitative data validity was ensured by member checking, in which the researcher asked the participants to verify the accuracy of the reported data (Creswell, 2002).

With regard to the analysis of the verified transcripts, the qualitative research questions were analyzed in a couple of different formats. Text analysis software through the surveymonkey.com website was again utilized. Transcribed responses could be manually entered into individual fields within surveymonkey.com to allow for text analysis. In addition, the researcher also analyzed the transcripts manually. Qualitative data analysis required the researcher to develop categories and make comparisons and contrasts. The framework that the researcher utilized included organizing the data, generating categories, themes and patterns; coding the data; testing the emergent understandings; searching for alternative explanations; and writing the report (Marshall & Rossman, 2011).

Because there was an abundant amount of text to analyze, coding was a critical component to data analysis. As Miles and Huberman (1994) suggest, coding assists researchers in identifying themes by looking for "recurrent phrases or common threads" (p. 149). From the interview transcripts, the researcher looked for "themes to emerge from the data to give the data shape and form" (Lawrence-Lightfoot & Davis, 2002, p. 185). Consistent with traditional social sciences research, the researcher allowed the codes to emerge during the data analysis (Creswell, 2009). Tesch (1990) provides a useful guide to the coding:

1. Get a sense of the whole. Read all transcriptions carefully. Perhaps jot down some ideas as they come to mind.

2. Pick one document. Go through it, asking yourself, “What is this about?” Do not think about the substance of the information but its underlying meaning. Write thoughts in the margin.
3. When you have completed this task for several participants, make a list of all topics. Cluster together similar topics. Form these topics into columns, perhaps arrayed as major topics, unique topics, and leftovers.
4. Now take this list and go back to your data. Abbreviate the topics as codes and write the codes next to the appropriate segments of the text. Try this preliminary organizing scheme to see if new categories and codes emerge.
5. Find the most descriptive wording for your topics and turn them into categories. Look for ways of reducing your total list of categories by grouping topics that relate to each other.
6. Make a final decision on the abbreviation for each category and alphabetize these codes.
7. Assemble the data material belonging to each category in one place and perform a preliminary analysis.
8. If necessary, recode your existing data. (pp. 142-145)

Once the emergent themes were identified through the content analysis, the researcher determined the most appropriate way to represent the data. Cross-validation through use of an external audit coding the same data ensured reliability and validity as well. Upon completion of data interpretation, the researcher sought to make meaning of the data and report the findings (Creswell, 2009).

Mixed Methods Data Analysis

As Creswell and Plano Clark (2007) note, mixed methods data analysis in a sequential study serves the purpose of using the "information from the analysis of the first database to inform the second database" (p. 142). Individuals provided consent when completing their survey. All of these results were utilized for data analysis. In addition, if individuals wished to be considered for inclusion in the second phase of data collection involving interviews, they were asked to provide their identity and contact information for the researcher. This allowed for follow-up interviews to take place to further explain the data received via the first phase. Using a purposive sampling strategy, the follow-up interviewees were chosen based on typical sampling. Validity in this stage, or inference quality, of the mixed methods analysis was defined "as the ability of the researcher to draw meaningful and accurate conclusions from all the data in the study" (p. 146).

Ethical Considerations

The researcher's main obligation was to respect the rights and needs of the study participants. Individual survey data was not reported. Names of the participants in regard to their responses were never disclosed. For those participating in the follow-up interviews, they remained anonymous. All efforts were made to avoid being intrusive.

Informed consent forms were provided and intended to protect the participants. Individuals were informed about the purpose of the study and the procedures that were to take place. Confidentiality was maintained throughout the study.

Researcher's Resources and Skills

Prior to embarking on this mixed methods research study, the researcher has completed basic coursework in the doctoral program in quantitative studies (EDPS 859).

Qualitative coursework has also been completed (EDUC 900K). Other research classes have been completed throughout the researcher's undergraduate and master's coursework, including a course on Mixed Methods (EDPS 936). Additional relevant projects and experiences have also guided the researcher in this research endeavor. The researcher was also fortunate enough to work with research and journal publications on a daily basis while serving as Managing Editor of *Human Resource Development Review* over the course of four years.

CHAPTER 4: DATA ANALYSIS

This study, a mixed methods sequential explanatory design, collected information in two phases. The first phase was a web-based survey; the second phase involved follow-up interviews with nine individuals who had participated in the survey to gather more detailed data. The online survey included Likert-scale questions to collect quantitative data. Some opportunity for participants to include qualitative data was available through the use of open-text boxes, although data collected in this manner was quite limited. In-depth qualitative data was sought through semi-structured follow-up interviews with individuals who self-selected themselves to be in the pool of candidates to be chosen for an interview.

Description of the Sample

This study gathered information from 36 past ACE Fellows. The number of responses to the survey from the first email communication was 14. Following the second email communication, there were a total of 32 responses. Once the third email was sent, a total of 35 individuals had participated. At the conclusion, with the final email including a “thank you,” a total of 36 ACE Fellows chose to complete the survey, producing a 36.7% response rate. The 36.7% response rate fell within the acceptable range for response rates for online surveys [32.52% - 41.25%] (Hamilton, 2003).

Demographics of the respondents were collected from closing questions in the survey. Fifty-six percent of the respondents were female (n=20), and 44% were male (n=16). Seventeen percent were between the age ranges of 60 and 69 (n=6), 64% were between the age ranges of 50 and 59 (n=23), and 19% were between the age ranges of 40 and 49 (n=7). Sixty-one percent of the respondents self-identified their race or ethnicity

as white (n=22), 19% self-identified as black (n=7), 6% self-identified as Hispanic (n=2), 6% self-identified as Asian/Pacific Islander (n=2), and 3% self-identified as American Indian/Alaska Native (n=1). Two respondents selected “other” and self-identified as “Black, West Indian, and Spanish” and “multi-racial.” Fifty-three percent presently work for 4-year public institutions (n=19), 33% are at 4-year private, nonprofit institutions (n=12), 8% are at 2-year public institutions (n=3), 3% are at 2-year private, nonprofit institutions (n=1), and 3% classified their employer as “other” specifically stating they work for an association (n=1). When asked which type of Fellows Placement they participated in, 78% indicated full academic year (n=28), 14% indicated academic semester (n=5), and 8% indicated periodic/flexible placements (n=3). Finally, when asked about their position title or rank pre-ACE Fellows experience to their current position title or rank, 31 of the 36 respondents provided a response to this question. A large majority of those who responded, 81%, have increased their rank in higher education (n=25); 19% have seen their rank decrease in higher education (n=6). For example, one respondent was an Interim Dean prior to the ACE Fellows program; upon completion, this individual realized higher education administration was not desired, and he instead chose to return to the faculty rank. As another respondent noted, the ACE Fellows program allows individuals to see if these leadership roles are truly what one is interested in seeking without having to fully go through the search/acceptance process.

Quantitative Data Analysis

The survey began with an opportunity for respondents to provide their beliefs and perceptions about mentoring in general (Q1 and Q2). Following, Likert-scale questions were aimed at ascertaining beliefs about the level of use of career development (Q3) and

psychosocial functions (Q5), as well as the degree to which those functions contributed to one's leadership development (Q4 and Q6). Survey questions were individually assessed with respect to the research question(s) being addressed. Survey data is shown in detail in Appendix M.

The opening short-answer question (Q1) allowed participants to express their belief of the value of mentoring. Thirty-five out of 36 respondents (97.2%) provided usable responses to this question. Of those responding, 94% believed that mentoring is valuable (n=33). As one individual stated, "Yes, mentoring is very valuable because you have the opportunity to have a one-on-one relationship with an experienced leader with unlimited opportunities to learn and see leadership in action." Another provided a similar response: "Yes, mentoring provides information that might not be readily available through other means and feedback about potential options that are under consideration." Positive responses continued, as one respondent stated mentoring is "extremely valuable. The guidance and assistance that mentors provide in a collegial environment enhances learning and practice."

Two respondents noted mentoring is somewhat valuable, providing responses such as, "it is valuable to the degree one gets good information from the experience and knowledge of the mentor." Another individual provided a very descriptive response as to why it can be somewhat valuable:

> It entirely depends. Nothing is valuable in absolute terms. The value of mentoring depends on a spectrum of questions: Was it enjoyable being mentored? Was it a boost to your perception of your opportunities, planning, self-awareness,

judgment? Were there concrete outcomes in terms of recommendations for jobs, outreach to you for opportunities suitable for you? On and on.

Following this, participants were specifically asked (Q2) if they believed their mentoring received through the ACE Fellows program was valuable. Thirty-four of the 36 participants (94.4%) provided usable responses to this question. Of those responding, 82% (n=28) felt it was valuable, and many provided very positive commentary explaining why. Several made mention that they would not have had access to such experiences, insights, and information prior to a full-fledged leadership role if it was not for the ACE Fellows program. One simply stated, "I learned a great deal from the mentors' personal and professional experiences through many one-on-one conversations. I also gained significant confidence in my own ability when the mentors verified the validity of my judgment." Another commended the mentoring: "I would not be in the position I'm in without it. I continue to use my network of ACE Fellows and mentors to grow and develop, and to seek critical advice on career advancement."

Four respondents felt their ACE Fellows mentoring experience was somewhat valuable. "It was fine, but there were other aspects I believe were more valuable from the Fellows program," one commented. Two Fellows indicated they did not believe it was of value. One individual noted her experience was "not particularly valuable in my opinion." Another simply stated, "It was of limited value."

The reliability of the Likert-scale questions were again analyzed with the use of Cronbach's alpha. "When using Likert-type scales it is imperative to calculate and report Cronbach's alpha coefficient for internal consistency reliability for any scales or subscales one may be using" (Gliem & Gliem, 2003, p. 88). The value of alpha should

range from .70 to 1.00 (Jackson, 2003). While the reliability analyses of the instrument were found to be reliable in the pretest, the researcher wanted to provide the alpha values for the research study as well. The reliability analyses of the instrument conducted during the study provided values at or above .77, indicating the instrument was again found to be reliable. The alpha value for Question 3 (utilization of career development functions) was .79; the alpha value for Question 4 (benefit of career development functions) was .82; the alpha value for Question 5 (utilization of psychosocial functions) was .77; and, the alpha value for Question 6 (benefit of psychosocial functions) was .87.

Research Question 1 – To what extent are career development functions of mentoring utilized in the ACE Fellows program?

The survey item (Q3) which addressed research question one was analyzed using descriptive statistics. Respondents were asked to address the degree their mentor(s) provided/utilized five various career development mentoring functions: sponsorship, exposure-and-visibility, coaching, protection, and challenging assignments.

Table 8
Survey Question 3: Utilization of Career Development Functions

Mentoring Function	Never Utilized	Seldom Utilized	Sometimes Utilized	Often Utilized	Very Frequently Utilized
Likert Rank	0	1	2	3	4
Sponsorship	16.7%	13.9%	33.3%	25.0%	11.1%
Exposure-and-Visibility	19.4%	11.1%	30.6%	22.2%	16.7%
Coaching	5.6%	16.7%	19.4%	30.6%	27.8%
Protection	27.8%	22.2%	13.9%	33.3%	2.8%
Challenging Assignments	13.9%	11.1%	11.1%	22.2%	41.7%

Based upon the 36 responses, the most frequently utilized career development function within their ACE Fellowship was challenging assignments (n=15). Conversely, the least utilized mentoring function from these respondents' experiences was protection (n=10). When combining the top two categories of utilization, "Often Utilized" and "Very Frequently Utilized," two mentoring functions stood out above the others as far as utilization: coaching (n=21) and challenging assignments (n=23). When combining the bottom two categories, "Never Utilized" and "Seldom Utilized," protection was still the least utilized function (n=18).

When considering the mean responses for each of the career development mentoring functions, the following were the results: sponsorship (mean=2.0); exposure-and-visibility (mean=2.1); coaching (mean=2.6); protection (mean=1.6); and, challenging assignments (mean=2.7). Overall mean for utilization of career development mentoring functions was 2.2. These mean responses were slightly altered when only taking into consideration those functions that were utilized: sponsorship (mean=2.4); exposure-and-visibility (mean=2.6); coaching (mean=2.7); protection (mean=2.2); and, challenging assignments (mean=3.1). The adjusted overall mean for career development functions that were truly utilized within the ACE Fellowship was 2.6.

Research Question 2 – To what degree are career development functions beneficial to leadership development for the ACE Fellows?

The survey item (Q4) which addressed research question two was analyzed using descriptive statistics. Respondents were asked to address their perception of how beneficial each career development function was to their own leadership development.

Table 9
Survey Question 4: Perceived Benefit of Career Development Functions

Mentoring Function	N/A (not utilized)	Not At All Beneficial	Somewhat Beneficial	Moderately Beneficial	Extremely Beneficial
Likert Rank	0	1	2	3	4
Sponsorship	16.7%	8.3%	25.0%	13.9%	36.1%
Exposure-and-Visibility	19.4%	0.0%	19.4%	19.4%	41.7%
Coaching	5.6%	8.3%	11.1%	25.0%	50.0%
Protection	27.8%	2.8%	25.0%	33.3%	11.1%
Challenging Assignments	13.9%	2.8%	8.3%	22.2%	52.8%

Based upon the 36 responses, the most beneficial career development function within their ACE Fellowship was challenging assignments (n=19), followed closely by coaching (n=18). Conversely, the least beneficial mentoring functions which were utilized from these respondents' experiences were sponsorship (n=3) and, ironically, coaching (n=3). The assumption from the data collected was that if a mentoring function was not utilized, the ACE Fellow could not provide a ranking of how beneficial that function was. Thus, larger percentages, higher frequencies, were in the correlating column for "N/A (not utilized)." When combining the top two categories of benefit, "Extremely Beneficial" and "Moderately Beneficial," two mentoring functions stood out above the others as far as benefit: coaching (n=27) and challenging assignments (n=27). On the contrary, when looking at the lower two categories of benefit from functions that were utilized, "Not At All Beneficial" and "Somewhat Beneficial", sponsorship (n=12) and protection (n=10) have the most frequency for limited benefit to the Fellows.

When considering the mean responses for the benefit of the career development mentoring functions, the following were the results: sponsorship (mean=2.4); exposure-

and-visibility (mean=2.6); coaching (mean=3.1); protection (mean=2.0); and, challenging assignments (mean=3.0). Overall mean for the career development benefit was 2.6. Again, when calculating the mean for benefit by only including the functions that were utilized, the averages were slightly altered: sponsorship (mean=2.9); exposure-and-visibility (mean=3.3); coaching (mean=3.2); protection (mean=2.7); and, challenging assignments (mean=3.5). The adjusted overall mean for benefit of career development functions that were actually utilized was 3.1.

Research Question 3 – To what extent are psychosocial functions of mentoring utilized in the ACE Fellows program?

The survey item (Q5) which addressed research question three was analyzed using descriptive statistics. Respondents were asked to address the degree their mentor(s) provided/utilized four various psychosocial mentoring functions: role modeling, acceptance-and-confirmation, counseling, and friendship.

Table 10
Survey Question 5: Utilization of Psychosocial Functions

Mentoring Function	Never Utilized	Seldom Utilized	Sometimes Utilized	Often Utilized	Very Frequently Utilized
Likert Rank	0	1	2	3	4
Role Modeling	0.0%	2.8%	16.7%	41.7%	38.9%
Acceptance-and-Confirmation	0.0%	2.8%	16.7%	55.6%	25.0%
Counseling	0.0%	16.7%	27.8%	33.3%	22.2%
Friendship	2.8%	11.1%	19.4%	41.7%	25.0%

From the 36 responses received, the most frequently utilized psychosocial mentoring function within their ACE Fellowship was role modeling (n=14). Conversely,

the least utilized psychosocial function from these respondents' experiences was friendship (n=1). When combining the top two categories of utilization, "Often Utilized" and "Very Frequently Utilized," two mentoring functions stood out above the others as far as utilization: role modeling (n=29) and acceptance-and-confirmation (n=29). When combining the bottom two categories, "Never Utilized" and "Seldom Utilized," counseling (n=6) and friendship (n=5) were the least utilized functions.

When considering the mean responses for each of the psychosocial mentoring functions, the following were the results: role modeling (mean=3.2); acceptance-and-confirmation (mean=3.0); counseling (mean=2.6); and, friendship (mean=2.8). Overall mean for utilization of psychosocial mentoring functions was 2.9. All of these mean responses were not altered when only taking into consideration those functions that were utilized since nearly all respondents had noted at least some form of utilization for these functions. In addition, the adjusted overall mean held steady as well at 2.9.

Research Question 4 – To what degree are psychosocial functions beneficial to leadership development for the ACE Fellows?

The survey item (Q6) which addressed research question four was analyzed using descriptive statistics. Respondents were asked to address their perception of how beneficial each psychosocial function was to their own leadership development.

Table 11
Survey Question 6: Perceived Benefit of Psychosocial Functions

Mentoring Function	N/A (not utilized)	Not At All Beneficial	Somewhat Beneficial	Moderately Beneficial	Extremely Beneficial
Likert Rank	0	1	2	3	4
Role Modeling	0.0%	5.6%	11.1%	19.4%	63.9%
Acceptance-and-Confirmation	0.0%	8.3%	11.1%	33.3%	47.2%
Counseling	0.0%	13.9%	19.4%	33.3%	33.3%
Friendship	2.8%	11.1%	25.0%	33.3%	27.8%

From the 36 responses received, the most beneficial psychosocial mentoring function within their ACE Fellowship was role modeling (n=23). Conversely, the least beneficial mentoring functions which were utilized from these respondents' experiences were counseling (n=5) and friendship (n=4). The same assumption was made for the psychosocial functions: if a mentoring function was not utilized, the ACE Fellow could not provide a ranking of how beneficial that function was. This did not affect the psychosocial data as the majority of respondents indicated some form of utilization, thus they were able to rank how beneficial they believed these functions to be. When combining the top two categories of benefit, "Extremely Beneficial" and "Moderately Beneficial," two psychosocial functions stood out above the others as far as benefit: role modeling (n=30) and acceptance-and-confirmation (n=29). On the contrary, when looking at the lower two categories of benefit from functions that were utilized, "Not At All Beneficial" and "Somewhat Beneficial", friendship (n=13) and counseling (n=12) have the most frequency for limited benefit to the Fellows.

When considering the mean responses for the benefit of the psychosocial mentoring functions, the following were the results: role modeling (mean=3.4);

acceptance-and-confirmation (mean=3.2); counseling (mean=2.9); and, friendship (mean=2.7). Overall mean for the psychosocial benefit was 3.1. Again, the majority of these means did not change when only including the functions that were utilized; the only slight change was noted in friendship (mean=2.8). Thus, since three of the four means did not change, and the fourth mean only slightly changed, the adjusted overall mean for benefit of psychosocial functions held steady at 3.1.

Although survey respondents were not directly asked to assess the relationship between the use and benefit of the mentoring functions, it seemed logical in this stage of the data analysis for the researcher to reformulate and reassess the research questions being addressed. Once immersed in the data analysis, the researcher considered if there was any relation between utilization and benefit among mentoring functions. Therefore, based upon the data collected, further quantitative data analysis was conducted to explore any correlation between utilization and benefit of each individual mentoring function. Correlation data allowed the researcher to see if ACE Fellows perceived the utilization and benefit of each function to be in relation with one another, which aligned with how questions were posed for the qualitative follow-up interviews. It was assumed that if a mentoring function was utilized, it would be perceived as beneficial, thus the rationale for a one-tail Pearson Correlation test. It should be noted, the value of n differs among the functions as correlation was only calculated for those individuals that reported utilization/benefit. If there was no utilization, the respondents automatically selected a corresponding value for benefit, “N/A (not utilized),” which would alter correlation calculations. Tables 12 and 13 describe the relevant correlation data for all career development and psychosocial mentoring functions respectively.

Table 12
Correlation Data for Utilization and Benefit among Career Development Functions

Mentoring Function	N	*R*	p-value
Sponsorship	30	.507	.002
Exposure-and-Visibility	29	.284	.068
Coaching	34	.583	.000
Protection	26	.376	.029
Challenging Assignments	31	.599	.000

As can be seen, multiple correlations were found to be statistically significant, which infers the ACE Fellows have found a relation between the benefit from the career development functions being utilized. More specifically, the correlation between utilization and benefit for sponsorship, coaching, and challenging assignments was found to be significant at the .005 level; for protection, it was found to be significant at the .05 level.

Table 13
Correlation Data for Utilization and Benefit among Psychosocial Functions

Mentoring Function	N	*R*	p-value
Role Modeling	36	.564	.000
Acceptance-and-Confirmation	36	.563	.000
Counseling	36	.635	.000
Friendship	35	.645	.000

Deriving meaning from the psychosocial data, again, ACE Fellows have found a relation between the benefit from the mentoring functions being utilized. More specifically, every correlation between utilization and benefit for psychosocial functions was found to be significant at the .005 level. This provided an opportunity to delve deeper into the relationship between utilization and benefit within the qualitative follow-up interviews.

Qualitative Data Analysis

Following data collection and initial analysis of the quantitative survey data, nine individuals were purposively selected to participate in the follow-up telephone interviews. A total of 18 survey respondents volunteered to be in the pool of candidates for the follow-up interview; 72% were female (n=13); 28% were male (n=5). Initially, nine email invitations were sent out to individuals who were purposively selected to participate, and six of these individuals agreed to continue their participation. After one week, a second email was sent just to ensure contact was made with the potential interviewees who had not yet responded. Upon not hearing from them, three more emails were sent to candidates who had agreed to participate in the follow-up interviews. From this invitation, two more individuals agreed to participate, and one did not respond. At this time, one additional email invitation and one phone invitation were made to obtain the last interview participant, who confirmed via email.

Of the individuals that were among the nine confirmed interviewees, 67% were female (n=6), and 33% were male (n=3). Sixty-seven percent were between the age ranges of 50 and 59 (n=6), 22% were between the age ranges of 40 and 49 (n=2), and 11% were between the age ranges of 60 and 69 (n=1). Seventy-eight percent of the respondents self-identified their race or ethnicity as white (n=7), 11% self-identified as black (n=1), and 11% self-identified as Hispanic (n=1). Forty-four percent presently work for 4-year public institutions (n=4), 44% are at 4-year private, nonprofit institutions (n=4), and 11% are at 2-year public institutions (n=1). When asked which type of Fellows Placement they participated in, 67% indicated full academic year (n=6), 22% indicated academic semester (n=2), and 11% indicated periodic/flexible placements (n=1). Finally,

when examining the rank of individuals who responded, 78% had increased their rank in higher education when comparing pre-ACE Fellows positions to their current positions (n=7); 22% had seen a decrease in rank within their higher education positions (n=2).

The semi-structured follow-up interviews consisted of asking 14 open-ended questions of the participants. The majority of the questions were designed to gather in-depth data to supplement the quantitative survey questions (see Appendix J). Conducting telephone interviews with selected ACE Fellows allowed the researcher to further explore data collected in the survey, to triangulate quantitative results, and also to probe for more information to allow more details to be brought to the surface.

Upon completion of transcription for each interview, a copy was emailed back to individual participants for their review. If any clarifications were necessary, those were made. Then, transcriptions were able to be manually entered into the surveymonkey.com website to allow for text analysis across individual questions. Initially, electronic key words in context were sought in this manner. Then, manual analysis followed as well. With nine interviews completed, manual data analysis was plausible. Such data analysis could ensure reliability and consistency of emergent themes. Common themes were found among research questions regarding utilization and benefit of both career development and psychosocial functions. Themes began to emerge when looking at the in-depth details provided from the qualitative interview responses. When utilizing the original quantitative survey data as a foundation for further analysis of the follow-up inquiry, the mixing of data resulted.

Initial interview questions (Q1 and Q2) allowed for introductory information to be shared. Background data and specific ACE Fellows placement details were provided.

Research Question 5 – What are the perceptions and experiences of protégés in regard to career development functions utilized in the ACE Fellows program?

Sponsorship. From the interview, Q3 addressed thoughts and experiences regarding sponsorship within their ACE Fellowship and how it benefitted their leadership development. Of those individuals interviewed, all nine believed that sponsorship was present in some form within the ACE Fellows experience, suggesting a common theme among respondents. While some were more emphatic than others, it remains rather consistent with survey data. In fact, on the survey, more individuals ranked sponsorship as being extremely beneficial than the number of individuals who reported it being very frequently utilized, suggesting that more sponsorship could be utilized to allow individuals to fully receive the extreme benefit that is perceived.

As one interviewee stated, "…even in academia, networking and having people know you…that idea of connections is still important." Another individual noted how she was invited to executive meetings, and that type of contact was extremely valuable. Finally, one respondent noted she felt she had the ultimate sponsorship in that a position was actually created for her upon completion of the ACE Fellows experience.

Exposure-and-visibility. The next question, Q4, asked interviewees to discuss their thoughts and experiences regarding exposure-and-visibility within their ACE Fellowship and how it benefitted their leadership development. All but two respondents indicated that exposure-and-visibility was definitely utilized within their ACE Fellowship, again suggesting a common theme. The remaining two believed it was somewhat utilized, but honestly believed it would result in more exposure than it did. While some interviewees provided more examples of experiences than others, it remains rather

consistent with survey data. In fact, on the survey, more individuals ranked exposure-and-visibility as being extremely beneficial than the number of individuals who reported it being very frequently utilized, suggesting that more of this function could be utilized to allow individuals to really receive the extreme benefit that is perceived.

One respondent indicated, “It was huge! Absolutely unbelievable! I met everybody that was anywhere around this region” while working with the President at the host institution. Furthermore, she elaborated on the ACE Fellows themselves being an enormous sponsorship resource: “You are only a Fellow during a single year, but you can call any ACE Fellow in the network and say that’s who you are and immediately talk to them, recommend somebody, or do whatever you need to do.” To tie into this, another individual stated, “the ACE Fellows program is seen as one of the premier programs in the country, so just saying that I was an ACE Fellow, people are [impressed].”

From the other perspective of it being somewhat utilized, but not to the degree it was expected, one individual noted the timing of her Fellowship hindered her exposure:

> Because I was in a class that basically became Fellows during the financial meltdown of 2008-2009, opportunities that had ordinarily been afforded were put on hold because retirements didn’t happen, there were leadership changes…and the piece of doors being opened and some of those types of opportunities had been somewhat less than I would have hoped.

Coaching. Following, Q5 allowed interviewees to expand upon their thoughts and experiences with regard to coaching within their ACE Fellowship and how it benefitted their leadership development. Seven of the nine interview participants had responses that resulted in a common theme indicating they felt coaching occurred within their ACE

Fellows experience; two did not perceive it to happen. Again, data gathered from the follow-up interviews remained rather consistent with survey data with regard to the coaching function. Once again, more individuals ranked the function as being extremely beneficial than the number of individuals who reported it being very frequently utilized, suggesting that even more coaching could be utilized to allow individuals to really receive the extreme benefit that is perceived.

During the interview, one individual noted, “My mentor was just so welcoming for me to be part of her routine…while I can’t remember specifically any negative feedback, I’d always ask her for comments, and she was always willing to help me understand what I didn’t know.” Another respondent noted she appreciated coaching from the fact that it forced her “to think more broadly about where [she] wanted to be in higher education.” From the opposite perspective, one stated he did not “think there was much of that during the ACE Fellowship or afterwards.” Another respondent said it was more about being “allowed access rather than coaching.”

Protection. Next, Q6 addressed interviewees’ thoughts and experiences regarding protection within their ACE Fellowship and how it benefitted their leadership development. The overwhelming majority, eight respondents, expressed a common theme and did not believe protection existed in their ACE Fellowship; one perceived it to exist somewhat. The question regarding the protection function gathered varying data when compared to the other functions; however, the responses from the interviews were again consistent with data collected via the survey. The responses were rather consistent among all rankings, but again, most individuals did not see this occur, nor did they believe that it needed to.

Respondents noted, “I didn’t need it,” or “I have a hard time of recalling anything that required that,” or “I didn’t really have difficult situations that required protection.” One individual stated she somewhat felt protection “when [her] recommendations or conclusions may have been things that people didn’t necessarily want to hear,” her host university was protective of her.

Challenging assignments. Finally, Q7 asked interviewees to address their thoughts and experiences with regard to challenging assignments within their ACE Fellowship and how they benefitted their leadership development. The common theme that surfaced was that challenging assignments were an integral part to the ACE Fellows program. Seven respondents indicated they were part of their Fellowship; two individuals believed they somewhat took place. The majority of responses were extremely insightful and positive toward this mentoring function. The data collected via follow-up interviews again remained consistent with initial survey data. In fact, on the survey, this function received the most responses for being frequently utilized and extremely beneficial. Slightly more individuals ranked challenging assignments as being extremely beneficial than the number of individuals who reported it being very frequently utilized, again suggesting that more challenging assignments could be utilized to allow individuals to actually receive the extreme benefit that is perceived as part of their ACE Fellowship.

Respondents were involved in various challenging assignments: partaking in institutional advancement work, learning a different governance structure, exploring various international-presence models, heading an institutional-wide diversity plan task force, and guiding a strategic planning process. When discussing their challenging assignments, it could be derived from the interviews that individuals truly believed these

activities to be an essential aspect to the Fellowship. A few individuals indicated challenging assignments somewhat occurred. One respondent believed more observing and shadowing occurred; however, she chose some challenging assignments on her own that were not necessarily directed to her from the host institution. In addition, an individual who was a Fellow for a shorter period of time noted her experience limited the availability of in-depth or multiple challenging assignments.

Research Question 6 – What are the perceptions and experiences of protégés in regard to psychosocial functions utilized in the ACE Fellows program?

Role modeling. From the list of semi-structured interview questions, Q8 asked interview participants to expand upon their thoughts and experiences regarding role modeling within their ACE Fellowship and how it benefitted their leadership development. The common theme was that utilization of this function did exist as eight respondents clearly indicated this; the remaining respondent did “not particularly” feel this was prevalent in her ACE Fellowship. The majority of interviewees were extremely positive about their role modeling experiences, and it further supported survey data. In fact, on the survey, role modeling received the highest response to being frequently utilized and extremely beneficial to one’s leadership development. In addition, more individuals ranked role modeling as being extremely beneficial than the number of individuals who reported it being very frequently utilized, suggesting that even more role modeling could be utilized to allow individuals to actually receive the extreme benefit that is perceived.

Affirmative responses were very descriptive. One stated, “Yes, [role modeling] definitely happened. I got to see these people every day firsthand and was involved in

multiple kinds of interaction…I had time to observe my mentors in every role they played." Another noted, "Certainly I learned a lot from watching [my mentor] work, so I would say that role modeling was a very helpful part of mentoring." A third respondent agreed, indicating it was helpful to see his mentors operate day-to-day. "I saw them at meetings, but then I also saw them in their offices, and we could talk there."

Acceptance-and-confirmation. The next question, Q9, inquired about interviewees' thoughts and experiences regarding acceptance-and-confirmation within the ACE Fellowship and how it benefitted their leadership development. Again, upon completion of the interviews, it was evident the majority of respondents, seven of nine, supported a theme of utilization with regard to acceptance-and-confirmation; one felt it somewhat occurred, and another indicated she did not feel this was necessary in her Fellowship stating, "I think I went in fairly strong….and I don't think I developed too much because of their involvement."

While some were more emphatic than others regarding the use and benefit of acceptance-and-confirmation, it remained rather consistent with survey data. Once again, on the survey, more individuals ranked acceptance-and-confirmation as being extremely beneficial than the number of individuals who reported it being very frequently utilized, suggesting that even more of this function could be utilized to allow individuals to really receive the extreme benefit that is perceived.

Those acknowledging the presence of acceptance-and-confirmation made mention of various examples. One individual noted that this "definitely" occurred in her ACE Fellowship, and she believes it is still occurring to this day, 10 years later, by her mentor. Another respondent stated, "I think the consistent feedback that I got during the time I

was there…really made me feel like they took my Fellowship seriously, and that they were vested in my success." Furthermore, another interviewee reported, "I think that [my mentors] provided support and encouragement…they were both very high on what I was doing. Really, it was both a humbling experience, a surprising response, and a very encouraging response that helped my confidence." Positive remarks continued from the interview participants:

> I received so much positive feedback, a lot of positive reinforcement from them. They were willing to say good job and offer critiques that were positively reinforcing things while allowing me to understand complex things more completely. That was probably the main thing…the people helped confirm what I was doing.

Counseling. Next, Q10 examined the thoughts and experiences interviewees had regarding counseling within their ACE Fellowship and how it benefitted their leadership development. Holding true to other psychosocial functions, the common theme was again acknowledgement that counseling had occurred within the ACE Fellows experience. Seven respondents undoubtedly recalled experiences and thoughts, and two individuals agreed that it was somewhat included. This follow-up data again supported the initial survey data. Again, on the survey, more individuals ranked counseling as being extremely beneficial than the number of individuals who reported it being very frequently utilized, suggesting again that Fellows perceive high value to this function and more utilization could occur.

An initial response to this the inquiry about whether counseling occurred was one respondent saying, "Very much so…[my mentor] has been a wonderful sounding board

for me to talk through things in my professional career." One Fellow noted how he appreciated the time his mentor would take to sit and listen, and his mentor would open up regarding personal struggles with professional decisions, and he noted "that was good for me to see." Another individual provided insight how she felt counseling was utilized in her own Fellowship:

> I think [counseling] went well. I think [both mentors] were very interested in my future career development, so we talked very broadly about the skill sets that I had, and if there were areas that needed further development. We talked about where I saw myself in the next three to five years; then we together kind of explored different paths to getting there. I did appreciate that.

Friendship. Lastly, Q11 solicited information from the interviewees regarding friendship within their ACE Fellowship and how it benefitted their leadership development. Holding true with the common theme found in responses to the questions centered on psychosocial functions, Fellows, again overall, felt friendship to also be present in their ACE Fellows experience. Six respondents confirmed they perceived it to be utilized, two individuals said it was somewhat included, and only one individual noted she did not feel it to be prominently present, and stated she looks toward other facets of her life for friendship. The data from the interviews confirms what was found via the survey. Responses were more spread out among the level of utilization and degree in benefit, indicating Fellows did not have a clear sense if friendship was present in some form, and further indicating Fellows could not clearly state if friendship played an instrumental role in their leadership development.

For those who felt it was somewhat present, they felt their friendship, or bond, developed over time, but it remained within the confines of work. It was truly a professional friendship, but sometimes in a more social sense. Others who felt more strongly regarding the presence of friendship provided additional details: “The personal basis, collegiality and friendship, just hitting it off was the basis of why I went to [that host institution]. It was also one of the foundations of trust and the feeling of being able to contribute something.” Another stated she believed “there was a lot of attention being given to making me feel comfortable beyond just the formal constraints of the Fellowship.” Finally, one noted she believed a professional friendship developed, especially “since I’m still in contact with her 10 years later.”

Research Question 7 – What additional information is gained about mentoring functions from the qualitative follow-up interviews that was not available from the quantitative Likert-scales?

Much more depth was provided from the follow-up interviews that the researcher would not have otherwise had if only utilizing the quantitative survey. These open-ended questions allowed for further thoughts to be shared and additional questions to be explored. Throughout data analysis, themes began to emerge.

Emergent Theme One – Multiple Sources of Mentorship. What stands out after thoroughly reviewing the transcripts is ACE Fellows identified a vast number of mentors throughout their Fellowship. Not only did they have their formal mentors at the host institution, but they also recognized mentors at their home institution who nominated them to become a Fellow. Additionally, ACE assigns a mentor as part of the Fellowship process, and many Fellows made mention that this relationship and ongoing

communication was extremely beneficial. Other mentors that were mentioned include ACE staff, Fellows within their respective cohorts, the Fellows network at large, and other colleagues that Fellows worked with at their host institution that were not identified as being formal mentors. The value of multiple sources of mentoring became apparent from the full transcripts, but also more specifically when addressing Q12 from the interview which asked, "Of all mentoring relationship experiences throughout your ACE Fellows experience, which do you believe to be the most beneficial in your own leadership development? Why?"

One Fellow noted, "The program itself is the most beneficial…the experiences with the other Fellows were all just superb." Another individual agreed: "I think what stands out most in my own leadership development and in terms of my own overall pleasure in the ACE program was working with so many competent peers. To see leadership at that level may have been more important to me than any of the rest of it." Furthermore, another respondent commented the most beneficial aspect for her was "the ongoing relationship that I had with the Presidential mentor that ACE assigned." Finally, another mentioned her President at the host institution: "He's been the continuous presence and mentor."

Emergent Theme Two – Recommendations for Stronger Post-Fellowship Mentoring. While recommendations were sought, in a sense, from Q13, what truly emerged were specific suggestions regarding the mentoring aspect of the ACE Fellows program. One individual even mentioned the idea of Fellows becoming mentors for future Fellows to ensure they serve both sides of the relationship. Another suggestion

included “a more systematic way of encouraging connections after the program.” One individual provided ample detail that truly mirrored the emergent theme:

> I think continuing the mentoring relationship in a more formalized way, either with the ACE Presidential mentor or one of the mentors from the Fellowship, just one year out…to help you think about your role when you got back…I think one year of post-mentor follow-up would really help you to make sense of what your experience had been and how best to translate that into future career success.

Emergent Theme Three –Positive View of Psychosocial Functions Collectively. When looking at the in-depth responses and reviewing notes from the interviews, it became apparent that data demonstrated Fellows had a very positive outlook on both the utilization and degree of benefit for psychosocial functions. When tying in the quantitative survey results, it was noted, on average, psychosocial functions were more frequently ranked at the higher levels of utilization as well as benefit.

When considering why such results may occur, one could argue that individuals at this level of being accepted into the Fellows program do not rely as much on career development functions; these have been experienced in many forms throughout various positions leading up to the ACE Fellow role. However, when an individual is contemplating the decision to become a campus leader, more of the psychosocial functions were found to be desirable and useful.

Summary

The results of a sequential explanatory mixed-methods study that began with a quantitative survey distributed to three classes of past ACE Fellows aided in explaining the use and perceived benefit of mentoring functions within the ACE Fellows program.

Significant correlation was found for the majority of the mentoring functions when looking at the relationship between utilization and benefit. These results from the quantitative portion were further supported when a specific number of participants were selected to provide in-depth information through qualitative follow-up telephone interviews. Such follow-up interviews allowed additional themes to emerge, providing respondents with the opportunity to discuss in more detail their mentoring experiences as part of the ACE Fellows program. When analyzing the data, the researcher was able to calculate descriptive statistics from the quantitative results, apply this information to the qualitative interviews when observing emergent themes, and then further mix the data to draw more meaning. Additional discussion into the conclusions and recommendations for further research are provided in the next chapter.

CHAPTER 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The content within this chapter is presented in three main sections. The first section summarizes the study, including a review of the study's purpose, supporting literature, and methods and procedures. The second section presents the conclusions, including a report of the important findings. Finally, the last section presents recommendations, including suggestions for future research and practical implications of this study.

Summary of the Research Study

Review of the Purpose

The purpose of this study was to examine and better comprehend the concept of mentoring within the American Council on Education (ACE) Fellows Program. This study addressed both career development and psychosocial functions of mentoring and how they applied to those participating in the ACE Fellows Program—from the Fellows' (or protégés') perspectives.

Review of Supporting Literature

Research has indicated within higher education, a setting devoted to the enhancement of learning, inquiry, and development, effective continuing development for individuals aspiring to be future campus leaders is lacking (Bornstein, 2005; Hargrove, 2003). More recently, the field of education has followed successful business organizations in recognizing mentoring as a critical component of effective leadership development (Remy, 2009). Since mentoring is said to play a vital role in leadership development, additional research to examine how it aids in leadership development is warranted. Braxton (2005) also noted in her research the impetus for deeply studying

mentoring due to “the high rate of turnover in campus senior administrative positions and the limited effort directed toward the development of qualified individuals…” (p. 11). Mentoring is now often recognized within the realm of human resource development (HRD) as a tool to provide such development; however, this recognition does not mean that mentoring is deeply understood or often applied (McCauley, 2005).

According to Gibbons (2000), “mentoring is a protected relationship in which learning and experimentation can occur, potential skills can be developed, and in which results can be measured in terms of competence gained rather than curricular territory covered” (p. 18). Such a relationship sounds ideal to garner future leaders of academic institutions.

Significant mentoring research has been conducted by Kram (1983, 1985, 1988). In her early stages of studying, she proposed a conceptual model identifying both career development and psychosocial functions of mentoring. Much of the mentoring research that is drawn from occurs in the business sector. As Brown (2010) noted in his recent dissertation, there is an abundance of literature in the business sector; however, to find detailed studies regarding mentoring in higher education becomes much more difficult.

As defined by Kram (1983) “career functions are those aspects of the relationship that primarily enhance career advancement,” such as sponsorship, exposure-and-visibility, coaching, protection, and challenging assignments (p. 614). Psychosocial functions are defined as “those aspects of the relationship that primarily enhance sense of competence, clarity of identity, and effectiveness in the managerial role,” such as role modeling, acceptance-and-confirmation, counseling, and friendship (p. 614).

"Extant theoretical and empirical research is clear that career and psychosocial functions serve as the primary distinct and reliable overarching operationalization of mentoring provided" (Allen et al., 2004, p. 128). These functions define the multiple roles a mentor may portray, as well as the disposition in which the protégé develops. Once aware of the functions that mentoring provides, one can now examine which, if any, are more common or beneficial within mentoring relationships among those seeking leadership development in higher education. As Rosser noted in her dissertation (2004), she was not aware of any research that has tried to validate Kram's research on mentoring functions.

Multiple perspectives of research continue to be conducted regarding mentoring. One perspective has loosely examined mentoring within the realm of higher education, a developmental learning ground. In such a setting, mentoring, an interpersonal relationship that fosters support between a mentor and a protégé, seems to be an ideal developmental tool for individuals desiring to learn campus leadership fundamentals. However, few true mentoring programs exist in higher education and little is deeply known about mentoring as a form of leadership development in higher education.

Utilized hand-in-hand with adult learning theory, formal mentoring appears to provide the opportunity for adults in higher education to recognize developmental possibilities. Along with the motivation to learn and a desire to utilize real-life experiences, adults taking part in formal mentoring results in an optimal likelihood of personal and professional development.

Review of the Methods and Procedures

For the purpose of this study, the researcher employed a Sequential Explanatory Design: Follow-up Explanations Study (see Appendix B). This type of study was used to gain additional information beyond that acquired from the quantitative phase alone. This study lent itself to the sequential explanatory format. It was appropriate because the researcher was looking to further explain data that was obtained in a quantitative manner. Much still needs to be learned regarding the use and application of specific mentoring functions in formal mentoring programs designed for higher education leaders. Therefore, with no known results, it was an extremely useful format to gather data.

In the first phase, quantitative survey data was collected from ACE Fellows participants via an email link. It identified which career development and psychosocial functions of mentoring were utilized and to what degree they were perceived to be beneficial to an individual's leadership development. The second phase involved conducting interviews with select survey respondents in an effort to better understand their mentoring experiences. These were conducted over the phone and via email, when necessary. In this explanatory follow-up, participants were selected based on typical sampling for case study research. Qualitative follow-up interviews helped to flesh out deeper details that the quantitative survey revealed (Plano Clark & Creswell, 2008).

Due to the fact there is a shortage of campus leaders because of increased retirement, gaining knowledge in how to develop future administrators would be beneficial. Such a mixed methods study could propose which mentoring functions likely enhance the learning experience, including how they do so, in developing future campus leaders.

The sample for the quantitative phase was based on the population of former participants in the American Council on Education (ACE) Fellows Program. The American Council on Education was asked for permission for the researcher to gather data on their Fellows. The Director of the ACE Fellows Program agreed to provide the researcher with access to survey three random classes for the quantitative phase. A random number generator, accessed via the internet, was utilized to determine three classes, and the following class groups were determined: 2001-2002, 2006-2007, and 2009-2010. This resulted in 116 former ACE Fellows potentially receiving the survey.

As discussed with the Director of the ACE Fellows program, it was difficult to reach all individuals as some have not maintained up-to-date contact information, some have passed on, and others have participated in additional research that the Director preferred to not have them overlap at the time of this research. As such, there was an end result of 98 email addresses being usable for this quantitative research portion. Individuals who provided responses to the quantitative portion of the research project gave consent to the researcher of their participation in the study by submitting their survey.

The sample for the qualitative phase was purposively selected from respondents who volunteered to potentially participate in the second phase of the study. Based upon the results, typical sampling best suited the research. Qualitative studies typically use purposive sampling techniques because specific individuals or cases are selected based upon their purpose associated with answering the research question(s) (Teddlie & Tashakkori, 2009). Various purposive sampling strategies were considered, and for this

research, those within the Sampling to Achieve Representatives or Comparability were most applicable (Teddlie & Tashakkori, 2009, p. 174).

To further explain results gathered from the first quantitative phase, nine individuals were asked for their informed consent to participate in the follow-up interviews. Interviewing nine individuals provided a reasonable sample for this phase of the investigation as it represented nearly 10% of those surveyed. Based upon discussion with the ACE Fellows Director, this constituted a representative sample for gathering additional details and provided rich data that was desired, and most likely content saturation would be reached at this point.

Prior to data collection, the Director of the ACE Fellows program sent a letter of endorsement to the three randomly selected classes encouraging them to participate (see Appendix C). Then, one week later, an e-mail cover letter (see Appendix D) was sent to each participant to inform the participants of the study and the contents of the quantitative survey. An original survey instrument (see Appendix G) was developed to collect data from ACE Fellows concerning their level of use and perceived degree of benefit from mentoring functions employed over their Fellowships. Each question in the survey was designed specifically to collect data regarding one variable of interest in this study. A total of 36 responses were received, producing a 36.7% response rate.

Based upon the survey results, follow-up open-ended, guided interviews were conducted. Interviews were sought with nine individuals who had agreed to participate in follow-up communication. Once email communication was made with follow-up candidates (see Appendix H), approval was obtained from nine individuals selected to participate in the interviews. When initial approval of each participant was obtained, an

email was sent to the participants, including an Informed Consent Form approved by the University of Nebraska-Lincoln Institutional Review Board (see Appendix I). Appointments for upcoming interviews, to be conducted via telephone, were scheduled directly with the confirmed participants.

These guided interviews took on a semi-structured, open-ended format allowing for rich qualitative data adding meaning to data that had been acquired quantitatively. For the qualitative guided interview portion, a tentative list of semi-structured, open-ended questions was utilized by the researcher (see Appendix J). The conclusion section presents a review of important findings from data analysis that was conducted.

Conclusions

Review of Research Questions

The sequential mixed-methods research design allowed for both quantitative and qualitative data to be addressed. In addition, at the conclusion, the mixing of data occurred to draw more meaning. This study was designed to answer the following research questions:

Quantitative Questions

1. To what extent are career development functions of mentoring utilized in the ACE Fellows program?
2. To what degree are career development functions beneficial to leadership development for the ACE Fellows?
3. To what extent are psychosocial functions of mentoring utilized in the ACE Fellow program?

4. To what degree are psychosocial functions beneficial to leadership development for the ACE Fellows?

Qualitative Questions

5. What are the perceptions and experiences of protégés in regard to career development functions utilized in the ACE Fellows program?
6. What are the perceptions and experiences of protégés in regard to psychosocial functions utilized in the ACE Fellows program?

Mixed Methods Question

7. What additional information is gained about mentoring functions from the qualitative follow-up interviews that was not available from the quantitative Likert scales?

Based upon the quantitative research questions, an original survey-instrument was developed. The survey sought to examine the utilization of individual mentoring functions, both from the career development and psychosocial forms. A total of 36 ACE Fellows chose to complete the survey, producing a 36.7% response rate. The 36.7% response rate fell within the acceptable range for response rates for online surveys [32.52% - 41.25%] (Hamilton, 2003).

Respondents were asked about the utilization of specific mentoring functions; they were also asked about the perceived benefit of mentoring functions toward their own leadership development. Although not originally sought from the survey questions asked, survey data revealed through additional analysis that nearly all mentoring functions demonstrated a statistically significant correlation between utilization and benefit. However, the correlation did not necessarily mean that high levels of utilization and

greater degrees of benefit were the norm. The level of utilization for a function was nearly the same as the perceived benefit for that function. In some instances, it could be seen from the data that more benefit was perceived than utilization, suggesting that additional use may be warranted if Fellows desire to experience a higher level of benefit.

The results of the telephone interviews supported the themes of utilization and benefit that were found from the survey. In addition, three emergent themes were found when mixing both forms of data to draw additional meaning. The first theme involved the numerous sources of mentoring that Fellows experienced. Not only were formal mentors part of the Fellowship at the host institution, but Fellows also experienced mentoring from Presidential mentors assigned by ACE, fellow Fellows in their cohort, mentors at their home institution, ACE staff, and other colleagues whom Fellows worked with as part of their Fellowship.

A second theme that emerged was the desire for additional mentoring post-Fellowship. Many individuals expressed their aspiration to have more contact for an additional year after the Fellowship in some formalized, systematic manner to ensure the transfer of the Fellowship occurs after leaving the host institution. A few individuals did note, however, this could pose challenges and difficulties logistically for the ACE program.

The third theme that emerged was a collectively positive view of psychosocial functions, even slightly more so than career development functions. It could be argued that the nature of individuals participating as Fellows do not need as much career development throughout the mentoring experience, but rather the social support that is provided by the psychosocial functions becomes more desired. Being within the ACE

network itself, as many noted, is beneficial for career development and advancement. What individuals sometimes still yearn for in leadership positions, such as a campus President, which was characterized by one individual as “one of the loneliest roles” in higher education, is more role modeling, acceptance-and-confirmation, counseling, and even friendship.

A primary conclusion that was drawn from the results relates to the hypothesized conceptual model (see Appendix K) that was developed prior to the research study being conducted. Upon completion of the study, a revised conceptual model has been proposed incorporating results from this research (see Appendix L). Some slight modifications were made to the post-research proposed model, as demonstrated by the thickness of arrows defining the relationship of each individual function to leadership development. The only psychosocial function that was altered significantly was acceptance-and-confirmation. It was hypothesized to not be overly influential toward one’s leadership development; however, from the study results, many ACE Fellows indicated acceptance-and-confirmation to be quite vital. In terms of career development functions, only one function was modified significantly. It was hypothesized that protection would play a more pivotal role in one’s leadership development; however, upon completion of the study, it became evident that many ACE Fellows did not perceive protection to be entirely necessary. Other functions within the model received small modifications as well. In all actuality, the hypothesized model was fairly accurate.

Recommendations

Mentoring continues to receive increased attention in higher education. As one Fellow noted, mentoring still remains a “buzz word” on campuses. The purpose of this

research was to examine and better comprehend the concept of mentoring within the American Council on Education (ACE) Fellows Program by addressing both career development and psychosocial functions of mentoring, specifically from the Fellows' (or protégés') perspectives.

Various recommendations have surfaced for future research. It is recommended that future research address other variables, such as age, gender, and employer type, to determine if other characteristics have an effect on data collected. The similarity (or difference) between mentor and protégé characteristics could also be examined. The study of additional variables could contribute to a more complete and complex picture of factors that contribute to positive (or negative) mentoring experiences. Future research should also examine the nature of the projects the Fellows worked on as part of their Fellowship to assess its value toward their development.

It is also recommended that the survey instrument be utilized for surveying additional classes of Fellows to confirm the findings of this study. A larger sample size for such a study would be ideal. Additionally, other perspectives could be addressed, specifically from the mentors and home institutions involved. Mentors could address the functions they perceived to be provided, and also the degree to which they saw benefit in their protégés' development throughout the Fellowship. Because this study relied upon self-reported data, future research utilizing observation techniques or validation from multiple perspectives could help to verify what the respondents are reporting.

Furthermore, the survey instrument could be revised for utilization with other formal mentoring programs geared toward leadership development in higher education. This could then broaden the results of mentoring functions and their application to one's

leadership development. Even informal mentoring programs in various higher education institutions could be researched in the future.

Summary

This chapter began with a summary of the study including a review of the purpose, literature, methods, and procedures. Conclusions were then presented based upon important findings related to the primary research questions. Finally, recommendations for future research are suggested.

Based upon the findings of this study, one major implication tends to stand out. One can have the perception of mentoring to be extremely valuable; however, when considering formal mentoring, it must be done well for the results to correlate to the original beliefs. Knowing “what” functions to provide and “how” to provide positive and influential mentoring experiences, based upon those functions investigated, can help mentors to catapult aspiring leaders to the forefront of higher education.

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APPENDICES

Appendix A

IRB Approval

December 15, 2011

Sheri Grotrian
Department of Educational Administration
277 Ash St. Syracuse, NE 68446

Richard Torraco
Department of Educational Administration
120 TEAC, UNL, 68588-0360

IRB Number: 20111212320 EX
Project ID: 12320
Project Title: Mentoring Functions within the American Council on Education (ACE) Fellows Leadership Development Program: A Mixed Methods Study

Dear Sheri:

This letter is to officially notify you of the approval of your project by the Institutional Review Board (IRB) for the Protection of Human Subjects. It is the Board's opinion that you have provided adequate safeguards for the rights and welfare of the participants in this study based on the information provided. Your proposal is in compliance with this institution's Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46) and has been classified as Exempt Category 2.

You are authorized to implement this study as of the Date of Final Approval: 12/15/2011.

1. The approved informed consent form has been uploaded to NUgrant (file with-Approved.pdf in the file name). Please use this form to distribute to participants. If you need to make changes to the informed consent form, please submit the revised form to the IRB for review and approval prior to using it.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:

* Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
* Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
* Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
* Any breach in confidentiality or compromise in data privacy related to the subject or others; or
* Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

This project should be conducted in full accordance with all applicable sections of the IRB Guidelines and you should notify the IRB immediately of any proposed changes that may affect the exempt status of your research project. You should report any unanticipated problems involving risks to the participants or others to the Board.

If you have any questions, please contact the IRB office at 472-6965.

Sincerely,

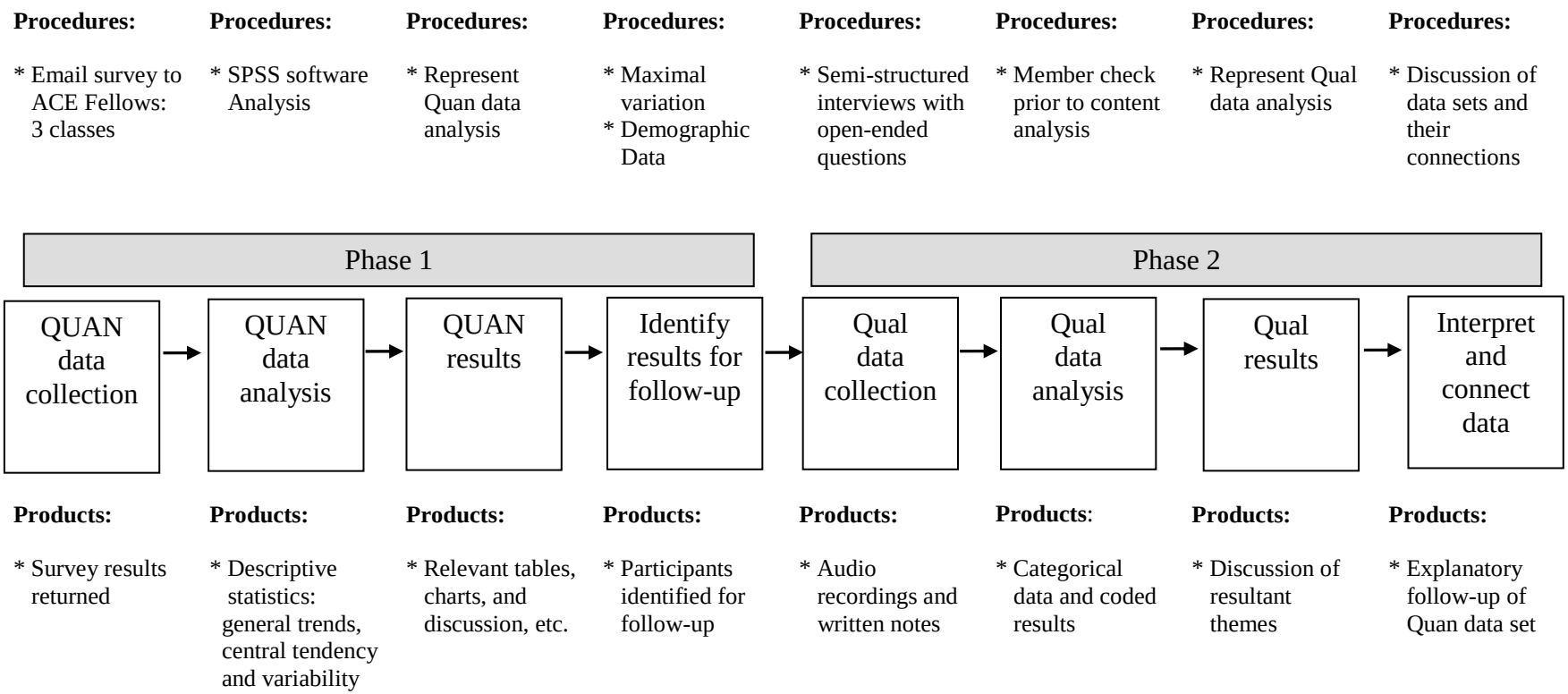
Becky R. Freeman

Becky R. Freeman, CIP
for the IRB

Association for the Accreditation of Human Research Protection Programs, Inc.
Full Accreditation

Appendix B

Research Design Model



Appendix C

Endorsement Letter from the ACE Fellows Director

American Council on Education™

Leadership and Advocacy

Greetings ACE Fellows!

The purpose of this letter is to introduce Sheri Grotrian-Ryan, a doctoral candidate in the Educational Leadership Program at the University of Nebraska – Lincoln. Sheri seeks to investigate "Mentoring Functions within the American Council on Education (ACE) Fellows Leadership Development Program" through a mixed methods design. I endorse her study for the knowledge that it can provide about the impact of the mentoring component of the Fellows Program. This letter verifies the legitimacy and purpose of Sheri's doctoral dissertation study. I invite–and urge–you to participate in her study.

Sheri will conduct a web-based survey with three randomly selected classes of Fellows. From your responses to her survey and interviews, Sheri hopes to better understand the use and benefit of mentoring applications as a developmental tool in higher education leadership.

Your participation in this study is entirely voluntary. Within the next week you will receive an email from me, on Sheri's behalf, with a web-based survey link. If you agree to take part, you can choose to complete the survey. From among those of you who agree to provide contact information, 8-10 individuals will be selected by Sheri for brief follow-up interviews.

Confidentiality and anonymity will be further explained in Sheri's communication that will be emailed to you by me. Please be assured that no report of participation or raw, identifiable data will be provided to the ACE Fellows Program office by Sheri. After successful defense of her dissertation, Sheri will provide a summary of her findings to me and to members of the three classes that constituted her sample, and, of course, her full dissertation will eventually be posted in the international dissertation database.

I hope you will choose to participate in Sheri's study, both to support her as a promising higher education researcher, and to advance our knowledge about the impact of the ACE Fellows Program. Please expect to receive an email from me, on Sheri's behalf, within the next week.

Sincerely,

Sharon A. McDade

Sharon A. McDade, Ed.D.
Director, Emerging Leaders/ACE Fellows Program

Appendix D

Email Cover Letter and Survey Link

Subject: Mentoring Functions and their Application to ACE Fellows Leadership Development

This is a doctoral research project that will collect information to identify which mentoring functions are most commonly utilized and seen as beneficial toward one's leadership development. You are being invited to participate because of your participation in the ACE Fellows Program. This doctoral research project will take approximately six months to complete.

Participation in this survey will require approximately 15-20 minutes of your time. This email is to inform you of the study and the contents of the survey. The survey link is found at the bottom of this email. The survey instrument you are receiving is titled, "Mentoring Functions and their Application to the ACE Fellows." It is made up of three main sections after a short introduction: Section I consists of Likert-scale questions assessing the amount of utilization and degree of benefit for career development mentoring functions. Section II is very similar in format except it is seeking input regarding the psychosocial mentoring functions. Finally, Section III concludes the survey with demographic and other relevant categorical data. You are being asked to respond to the survey questions and submit it via the survey link within two (2) weeks after receiving it.

The benefits of the information gained from this study will aid in not only being more informed about the use and benefit of mentoring applications within the ACE Fellows Program, but also informing the field of human resource development (HRD) in general. This study will also contribute to the body of knowledge concerning mentoring.

This survey is hosted on a secure website via surveymonkey.com. Any information obtained during this study which could identify you will be kept confidential, and you, as a participant, will remain anonymous in any report of findings. Only the researcher will have access to the data. Identifying information is only being retained from those participants who self-select to provide it in the case that the researcher would like to ask follow-up interview questions. The information obtained from this study may be published in journals or presented at conferences, but the data will only be reported as aggregate data.

There are no known risks or discomforts associated with this research. Also, there is no compensation for participation in this research study; it is intended to provide insight for the betterment of application of mentoring programs.

You may ask questions concerning this research and have those questions answered prior to agreeing to participate in this study. You may call the researcher at any time at (402)

269-0587. If you have questions concerning your rights as a research subject that have not been answered by the researcher, you may contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965.

You are free to decide not to participate in this study or to withdraw at any time without adversely affecting your relationship with the researcher or the University of Nebraska-Lincoln. Your decision will not result in any loss or benefits to which you are otherwise entitled.

You are voluntarily making a decision whether or not to participate in this research study. Your submission of the survey information does imply consent. Additional consent will be sought if follow-up information is desired via an interview.

Thank you very much for your valuable assistance with my doctoral research!

To participate, please follow this link: https://www.surveymonkey.com/s/W27HYKJ

Sheri Grotrian-Ryan
University of Nebraska-Lincoln
Doctoral Candidate

Appendix E

Follow-Up Email and Survey Link – for 2 Reminders

Subject: Mentoring Functions and their Application to ACE Fellows Leadership Development

Approximately one (or two) week(s) ago, you should have received an email regarding mentoring functions and their application to the ACE Fellows Program. To reiterate, this is a doctoral research project that will collect information to identify which mentoring functions are most commonly utilized and seen as beneficial toward one's leadership development. You are being invited to participate because of your participation in the ACE Fellows Program. This doctoral research project will take approximately six months to complete.

Participation in this survey will require approximately 15-20 minutes of your time. This email is to inform you of the study and the contents of the survey. The survey link is found at the bottom of this email. The survey instrument you are receiving is titled, "Mentoring Functions and their Application to the ACE Fellows." It is made up of three main sections after a short introduction: Section I consists of Likert-scale questions assessing the amount of utilization and degree of benefit for career development mentoring functions. Section II is very similar in format except it is seeking input regarding the psychosocial mentoring functions. Finally, Section III concludes the survey with demographic and other relevant categorical data. You are being asked to respond to the survey questions and submit it via the survey link within two (2) weeks after receiving it.

The benefits of the information gained from this study may aid in not only being more informed about the use and benefit of mentoring applications within the ACE Fellows Program, but also informing the field of human resource development (HRD) in general. This study will also contribute to the body of knowledge concerning mentoring.

This survey is hosted on a secure website via surveymonkey.com. Any information obtained during this study which could identify you will be kept confidential, and you, as a participant, will remain anonymous in any report of findings. Only the researcher will have access to the data. Identifying information is only being retained from those participants who self-select to provide it in the case that the researcher would like to ask follow-up interview questions. The information obtained from this study may be published in journals or presented at conferences, but the data will only be reported as aggregate data.

There are no known risks or discomforts associated with this research. Also, there is no compensation for participation in this research study; it is intended to provide insight for the betterment of application of mentoring programs.

You may ask questions concerning this research and have those questions answered prior to agreeing to participate in this study. You may call the researcher at any time at (402) 269-0587. If you have questions concerning your rights as a research subject that have not been answered by the researcher, you may contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965.

You are free to decide not to participate in this study or to withdraw at any time without adversely affecting your relationship with the researcher or the University of Nebraska-Lincoln. Your decision will not result in any loss or benefits to which you are otherwise entitled.

You are voluntarily making a decision whether or not to participate in this research study. Your submission of the survey information does imply consent. Additional consent will be sought if follow-up information is desired via an interview.

Thank you very much for your valuable assistance with my doctoral research!

If you have already completed the survey, thank you! If you have *not* already participated, please follow this link: https://www.surveymonkey.com/s/W27HYKJ

Sheri Grotrian-Ryan
University of Nebraska-Lincoln
Doctoral Candidate

Appendix F

Final Follow-Up Email and Survey Link and Thank You

Subject: Thank You to Survey Participants

Thank you to everyone who took the time over the last few weeks to complete my doctoral dissertation survey that was emailed out. If you would still like to participate yet this week, please follow this link: https://www.surveymonkey.com/s/W27HYKJ

I look forward to analyzing the data and conducting follow-up interviews with some select individuals in the next two weeks.

Thank you again for your valuable assistance with my doctoral research!

Sheri Grotrian-Ryan
University of Nebraska-Lincoln
Doctoral Candidate

Appendix G

Mentoring Functions and their Application to the ACE Fellows (Survey)

Introduction:

Thank you for agreeing to access the survey! Your feedback is vital to the completion of my dissertation research. This survey instrument collects information regarding the level or amount of utilization and the degree of benefit for mentoring functions in relation to your leadership development. As you respond to the questions, please specifically recollect and refer to the mentoring you received during your ACE Fellows experience. You can consider your primary mentor, and any additional mentoring you received from the host institution as well.

For this survey, definitions of the researched mentoring functions will be provided within the question. The data collected will be treated confidentially and only group data will be reported as an outcome of this research.

Individuals wishing to be considered for inclusion in the follow-up interview phase can provide their contact information at the conclusion of this survey; this is entirely voluntary. For those willing to participate, any identifying information will not be published as part of the dissertation study. Again, all information collected throughout this study will remain strictly confidential. It will not be distributed to anyone other than the researcher.

Please proceed to the beginning of the survey. Again, thank you for your participation!

INTRODUCTION

This introductory section asks a few key open-ended questions to allow the researcher to infer basic details regarding ACE Fellows participants' beliefs with regard to mentoring.

1. Do you believe mentoring is valuable? (open text box)

2. Do you believe your mentoring experience within the ACE Fellows program was valuable? (open text box)

****

SECTION I: CAREER DEVELOPMENT MENTORING FUNCTIONS

This sub-section of the survey will ask you to determine if specific career development mentoring functions were utilized *during* your ACE Fellows experience. Please select the best choice from your own experience. You have the opportunity to provide any follow-up commentary upon completion of the Likert-scale ratings; this, however, is not required.

The following scale can be referenced for the extent of the functions being utilized:

0	1	2	3	4
Never Utilized	Seldom Utilized	Sometimes Utilized	Often Utilized	Very frequently Utilized

3. To what degree did your mentor(s) provide/utilize the following career development mentoring functions?

Sponsorship (defined as opportunities that are created for the you to demonstrate competence and learning, such as nominating you for lateral moves and/or promotions):

0 1 2 3 4

Exposure-and-visibility (defined as doors being opened or connections that are made to support your career advancement with opportunities to perform):

0 1 2 3 4

Coaching (defined as being taught the "ropes" and being given relevant positive and negative feedback to improve your performance and potential):

0 1 2 3 4

Protection (defined as the support provided to you in difficult situations, shielding you from potentially damaging situations):

0 1 2 3 4

Challenging assignments (defined as the supporting assignments that stretch your knowledge and skills to obtain competence in your profession and feelings of accomplishment in your field):

0 1 2 3 4

(Open text box for comments or explanations)

****

This sub-section of the survey will ask you to determine how beneficial specific career development mentoring functions were *during* your ACE Fellows experience with regard to your own leadership development. Please select the best choice from your own experience. *Note, if the function was not utilized at all throughout your ACE Fellows mentoring experience, you may select N/A. In addition, you have the opportunity to provide any follow-up commentary upon completion of the Likert-scale ratings; this, however, is not required.

The following scale can be referenced for the degree of the function being beneficial:

0	1	2	3	4
N/A (not utilized)	Not at all Beneficial	Somewhat Beneficial	Moderately Beneficial	Extremely Beneficial

4. To what degree do you perceive the following career development functions to have been beneficial for your own leadership development?

Sponsorship (defined as opportunities that are created for the you to demonstrate competence and learning, such as nominating you for lateral moves and/or promotions):

0 1 2 3 4

Exposure-and-visibility (defined as doors being opened or connections that are made to support your career advancement with opportunities to perform):

0 1 2 3 4

Coaching (defined as being taught the "ropes" and being given relevant positive and negative feedback to improve your performance and potential):

0 1 2 3 4

Protection (defined as the support provided to you in difficult situations, shielding you from potentially damaging situations):

0 1 2 3 4

Challenging assignments (defined as the supporting assignments that stretch your knowledge and skills to obtain competence in your profession and feelings of accomplishment in your field):

0 1 2 3 4

(Open text box for comments or explanations)

****

SECTION II: PSYCHOSOCIAL MENTORING FUNCTIONS

This sub-section of the survey will ask you to determine if specific psychosocial mentoring functions were utilized *during* your ACE Fellows experience. Please select the best choice from your own experience. You have the opportunity to provide any follow-up commentary upon completion of the Likert-scale ratings; this, however, is not required.

The following scale can be referenced for the extent of the functions being utilized:

0	1	2	3	4
Never Utilized	Seldom Utilized	Sometimes Utilized	Often Utilized	Very frequently Utilized

5. To what degree did your mentor(s) provide/utilize the following psychosocial mentoring functions?

Role modeling (defined as the behaviors, attitudes, and/or skills that your mentor(s) demonstrated that aided in you achieving competence, confidence, and a clear professional identity):

0 1 2 3 4

Acceptance-and-confirmation (defined as ongoing support and respect you're your mentor portrayed that strengthened your self-confidence and self-image):

0 1 2 3 4

Counseling (defined as the helpful and confidential nature of your mentoring relationship. Your mentor(s) acted as a sounding board by demonstrating listening, trust, and rapport with you):

0 1 2 3 4

Friendship (defined as the mutual caring that extends beyond the daily work environment; experiences that occurred about work or outside work were shared with one another):

0 1 2 3 4

(Open text box for comments or explanations)

****

This sub-section of the survey will ask you to determine how beneficial specific psychosocial mentoring functions were *during* your ACE Fellows experience with regard to your own leadership development. Please select the best choice from your own experience. *Note, if the function was not utilized at all throughout your ACE Fellows mentoring experience, you may select N/A. In addition, you have the opportunity to provide any follow-up commentary upon completion of the Likert-scale ratings; this, however, is not required.

The following scale can be referenced for the degree of the function being beneficial:

0	1	2	3	4
N/A (not utilized)	Not at all Beneficial	Somewhat Beneficial	Moderately Beneficial	Extremely Beneficial

6. To what degree do you perceive the following psychosocial functions to have been beneficial for your own leadership development?

Role modeling (defined as the behaviors, attitudes, and/or skills that your mentor(s) demonstrated that aided in you achieving competence, confidence, and a clear professional identity):

0 1 2 3 4

Acceptance-and-confirmation (defined as ongoing support and respect you're your mentor portrayed that strengthened your self-confidence and self-image):

0 1 2 3 4

Counseling (defined as the helpful and confidential nature of your mentoring relationship. Your mentor(s) acted as a sounding board by demonstrating listening, trust, and rapport with you):

0 1 2 3 4

Friendship (defined as the mutual caring that extends beyond the daily work environment; experiences that occurred about work or outside work were shared with one another):

0 1 2 3 4

(Open text box for any comments or explanations)

****

SECTION III: DEMOGRAPHIC INFORMATION

Please provide responses to the following questions:

7. Age ranges
   - 30-39
   - 40-49
   - 50-59
   - 60-69
   - 70-79

8. Gender
   - Male
   - Female

9. Race/Ethnicity (select all that apply)
   - White
   - Black
   - Hispanic
   - Asian/Pacific Islander
   - American Indian/Alaska Native
   - Other (open text box)

10. Employer Type based upon IPEDS data (select 1)
    - 4-year public
    - 4-year private, nonprofit
    - 4-year private, for-profit
    - 2-year public
    - 2-year private, nonprofit
    - 2-year private, for-profit
    - Less than 2-year public
    - Less than 2-year private, nonprofit
    - Less than 2-year private, for-profit
    - Other: (please provide classification)

11a. Pre-ACE Fellows Highest Employment Rank (select 1)
    - Vice President/Cabinet Level
    - Assistant/Associate Provost
    - Dean
    - Assistant/Associate Dean
    - Director
    - Chair
    - Faculty
    - Other (text box)

11b. Current Employment Rank (select 1)
    - President
    - Provost
    - Vice President/Cabinet Level
    - Assistant/Associate Provost
    - Dean
    - Assistant/Associate Dean
    - Director
    - Chair
    - Faculty
    - Other (text box)

12. Type of Fellows Placement (select 1)
    - Full Academic Year
    - Academic Semester
    - Periodic/Flexible

13. If you would be willing to participate in the 2nd phase of this mixed-methods study, please provide your contact information (name, email, and/or phone number) below. Individuals who are selected will be contacted to set up a convenient time for an interview. Again, I thank you for your interest and assistance in completing this study!

(insert text box)

Thank you! Your participation is greatly appreciated!!!

Appendix H

Email Invitation to Participate in Follow-Up Interview

Dear Dissertation Survey Participant:

Thank you for your recent participation in the first phase of my doctoral research. Furthermore, thank you for indicating on the survey you would be willing to participate in the follow-up interview portion!

I would like to propose that we schedule an interview within the next week or two. The Institutional Review Board has approved my study to include phone interviews and follow-up email questions if necessary. Once I have a confirmation that you would like to continue participating in this phase of my research, I will then send an informed consent form outlining more specific information.

I look forward to learning more in-depth details regarding your experience as an ACE Fellow. No doubt, this study will contribute to the growing body of knowledge related to mentoring.

Thank you very much for your continued assistance with my doctoral research!

Sheri Grotrian-Ryan
University of Nebraska-Lincoln
Doctoral Candidate

Appendix I

Informed Consent Form for Follow-Up Interview Participants

Current Date

Dear Interview Participant:

You have been asked to participate in a research study on mentoring functions and their relation to your experience as an ACE Fellow. This study is being conducted by Sheri A. Grotrian-Ryan and will be the subject of her Ph.D. dissertation at the University of Nebraska-Lincoln.

You will be interviewed regarding your mentoring experiences as an ACE Fellow. This interview will last between 30-60 minutes in a location that is suitable for communication to occur via telephone. These interviews will be audiotaped, transcribed verbatim, and analyzed. Since verbatim transcripts are critical to the methodology, you will be informed that refusal to be audio recorded will be taken as a refusal to participate in the study.

The purpose of this study is to better understand mentoring functions and their application in mentoring relationships, specifically in regard to leadership development. This research will be used by both the researcher and ACE as a means of examining the use and benefit of mentoring functions.

You are being invited to participate in this qualitative phase of the study. The following information is provided to help make an informed decision of whether or not to participate. You are encouraged to ask questions at any time. You are free to decide not to participate in this study. You can also withdraw at any time without harming your relationship with the researcher or the University of Nebraska-Lincoln. There are no known risks or discomforts associated with this study.

All records will be held confidentially and your identity will remain anonymous. No one but the primary researcher will have access to the audio recordings, and only the primary researcher and the five members of her Supervisory Committee will have access to the transcripts made from the interviews (without identification). In the primary researcher's working documents, in her dissertation, and in any subsequent publication of the study, no real names will be used. The names of any persons discussed during the interview and institutional names will also be changed. Confidentiality is a top priority to the primary researcher.

If there are questions about this study, you are asked to contact the primary researcher, Sheri Grotrian-Ryan, at (402) 269-0587 or her advisor, Dr. Richard Torraco, at (402) 472-3853. This research study has been reviewed and approved by the Institutional Review Board at the University of Nebraska-Lincoln. If questions arise regarding your rights as a research subject that have not been answered by the researcher, or if you need to report any other issues about this study, you are asked to contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965.

Please sign here to signify consent: _____

☐ By checking here, you agree for the interview to be audiotaped.

Appendix J

Follow-up Interview Questions

Opening Questions

1. Please provide some background information as to your leadership progression to where you are now in academia.

2. Please tell me some specific information regarding your own ACE Fellowship experience.

Questions 3-7 address Career Development mentoring functions

3. Please discuss your thoughts regarding any experiences or examples of sponsorship within the ACE Fellows program, and how it benefitted your leadership development (sponsorship is defined as opportunities that are created for the you to demonstrate competence and learning, such as nominating you for lateral moves and/or promotions).

4. Please discuss your thoughts regarding any experiences or examples of exposure-and-visibility within the ACE Fellows program, and how it benefitted your leadership development (exposure-and-visibility is defined as doors being opened or the connections that are made to support your career advancement with opportunities to demonstrate performance).

5. Please discuss your thoughts regarding any experiences or examples of coaching within the ACE Fellows program, and how it benefitted your leadership development (coaching is defined as being taught the ‘ropes’ and being given relevant positive and negative feedback to improve your performance and potential).

6. Please discuss your thoughts regarding any experiences or examples of protection within the ACE Fellows program, and how it benefitted your leadership development (protection is defined as the support provided to you in difficult situations, shielding you from potentially damaging situations).

7. Please discuss your thoughts regarding any experiences or examples of challenging assignments within the ACE Fellows program, and how it benefitted your leadership development (challenging assignments is defined as the supporting assignments that stretch your knowledge and skills in order to obtain competence in your profession and feelings of accomplishment in your field).

Questions 8-11 address Psychosocial mentoring functions

8. Please discuss your thoughts regarding any experiences or examples of role modeling within the ACE Fellows program, and how it benefitted your leadership development (role modeling is defined as the behaviors, attitudes and/or skills that your mentor(s) demonstrated that aided in you achieving competence, confidence, and a clear professional identity).

9. Please discuss your thoughts regarding any experiences or examples of acceptance-and-confirmation within the ACE Fellows program, and how it benefitted your leadership development (acceptance-and-confirmation is defined as ongoing support and respect portrayed by your mentor(s) that strengthened your self-confidence and self-image).

10. Please discuss your thoughts regarding any experiences or examples of counseling within the ACE Fellows program, and how it benefitted your leadership development (counseling is defined as the helpful and confidential nature of your mentoring relationship; your mentor(s) acting as a sounding board by demonstrating listening, trust, and rapport with you).

11. Please discuss your thoughts regarding any experiences or examples of friendship within the ACE Fellows program, and how it benefitted your leadership development (friendship is defined as the mutual caring that extends beyond the daily work environment; experiences that occurred about work or outside work are shared with one another).

Overarching Questions

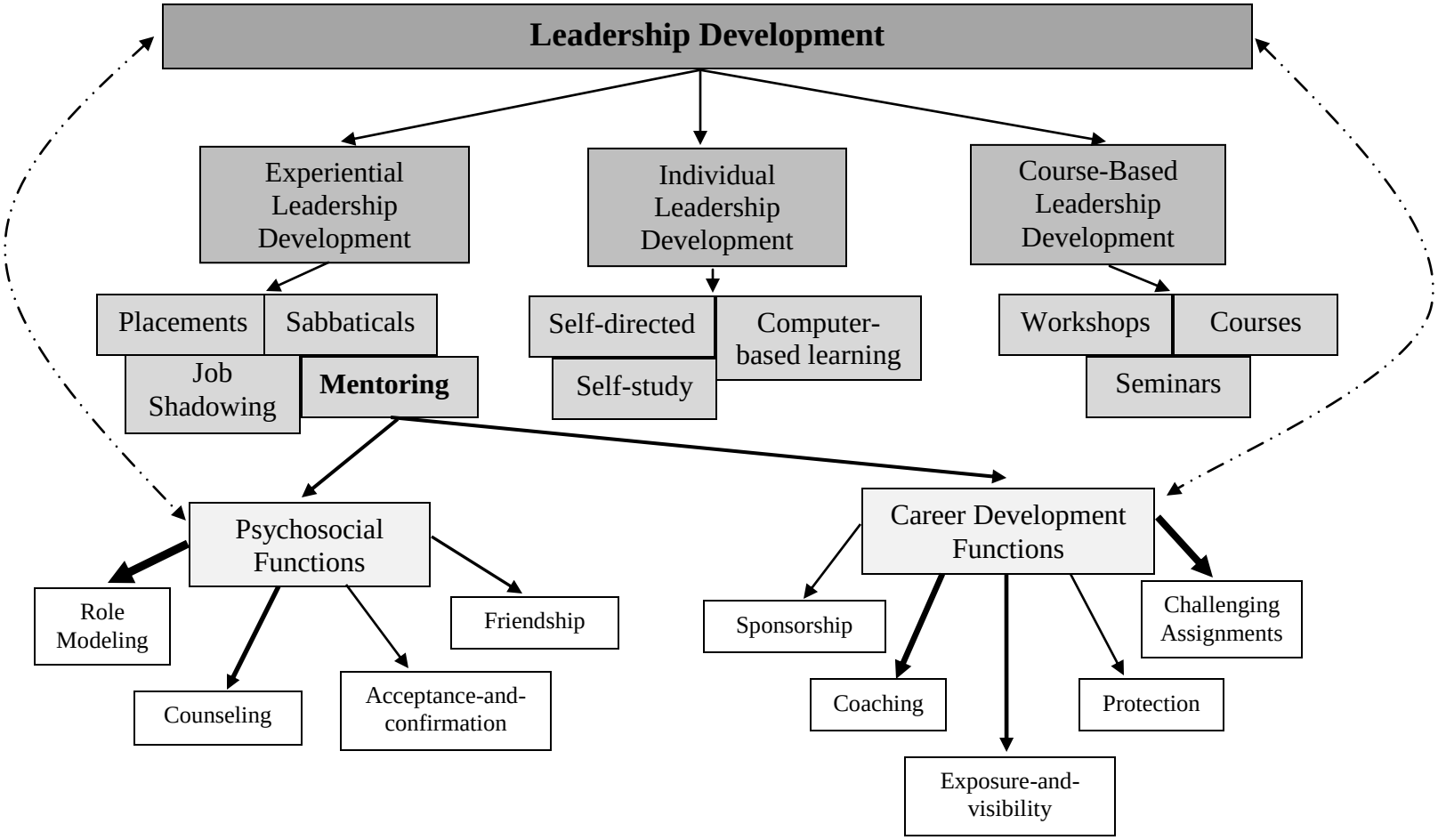
12. Of all mentoring relationship experiences throughout your ACE Fellows experience, which do you believe to be the most beneficial in your own leadership development? Why?

13. Is there anything you believe could be improved upon with regard to the mentoring relationships in the program to improve leadership development among ACE Fellows?

14. Please share any other information you feel is relevant to exploring mentoring functions and their application to the ACE Fellows' leadership development.

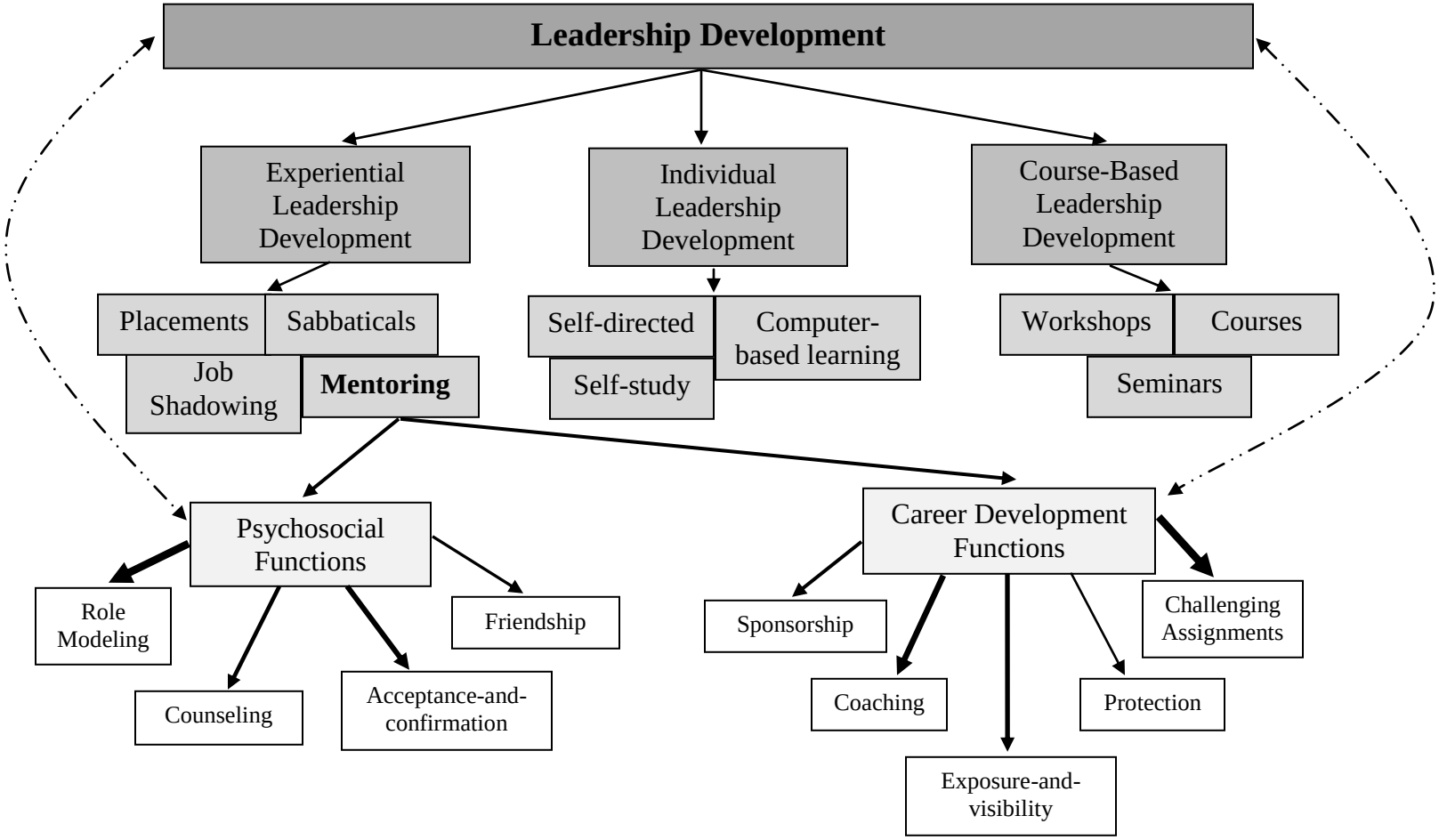
Appendix K

Hypothesized Conceptual Model of Mentoring Functions within Leadership Development



Appendix L

Proposed Conceptual Model of Mentoring Functions within Leadership Development (Grotrian-Ryan, 2012)



Note: The arrow connecting Acceptance-and-Confirmation is thicker in Appendix L than K as respondents found this function to be more important to their development than what was hypothesized. The arrow connecting Protection is thinner in Appendix L than K as respondents found this function to be less important to their development than what was hypothesized.

Appendix M

Resultant Data

Table 1a. Quantitative Survey Results for Career Development Mentoring Functions

Table 2a. Quantitative Survey Results for Psychosocial Mentoring Functions

Figure 1a. Correlation Results for Career Development Mentoring Functions

Figure 2a. Correlation Results for Psychosocial Mentoring Functions

Table 1a

Quantitative Survey Results for Career Development Mentoring Functions

Function/Rating	0	1	2	3	4	Mean	Adj. Mean
Sponsorship							
Utilization	n=6 (17%)	n=5 (14%)	n=12 (33%)	n=9 (25%)	n=4 (11%)	2.0	2.4
Benefit	n=6 (17%)	n=3 (8%)	n=9 (25%)	n=5 (14%)	n=13 (36%)	2.4	2.9
Exposure-and-Visibility							
Utilization	n=7 (19%)	n=4 (11%)	n=11 (31%)	n=8 (22%)	n=6 (17%)	2.1	2.6
Benefit	n=7 (19%)	n=0 (0%)	n=7 (19%)	n=7 (19%)	n=15 (42%)	2.6	3.3
Coaching							
Utilization	n=2 (6%)	n=6 (17%)	n=7 (19%)	n=11 (31%)	n=10 (28%)	2.6	2.7
Benefit	n=2 (6%)	n=3 (8%)	n=4 (11%)	n=9 (25%)	n=18 (50%)	3.1	3.2
Protection							
Utilization	n=10 (28%)	n=8 (22%)	n=5 (14%)	n=12 (33%)	n=1 (3%)	1.6	2.2
Benefit	n=10 (28%)	n=1 (3%)	n=9 (25%)	n=12 (33%)	n=4 (11%)	2.0	2.7
Challenging Assignments							
Utilization	n=5 (14%)	n=4 (11%)	n=4 (11%)	n=8 (22%)	n=15 (42%)	2.7	3.1
Benefit	n=5 (14%)	n=1 (3%)	n=3 (8%)	n=8 (22%)	n=19 (53%)	3.0	3.5

Table 2a

Quantitative Survey Results for Psychosocial Mentoring Functions

Function/Rating	0	1	2	3	4	Mean	Adj. Mean
Role Modeling							
Utilization	n=0 (0%)	n=1 (3%)	n=6 (17%)	n=15 (42%)	n=14 (39%)	3.2	3.2
Benefit	n=0 (0%)	n=2 (6%)	n=4 (11%)	n=7 (19%)	n=23 (64%)	3.4	3.4
Acceptance-and-Confirmation							
Utilization	n=0 (0%)	n=1 (3%)	n=6 (17%)	n=20 (56%)	n=9 (25%)	3.0	3.0
Benefit	n=0 (0%)	n=3 (8%)	n=4 (11%)	n=12 (33%)	n=17 (47%)	3.2	3.2
Counseling							
Utilization	n=0 (0%)	n=6 (17%)	n=10 (28%)	n=12 (33%)	n=8 (22%)	2.6	2.6
Benefit	n=0 (0%)	n=5 (14%)	n=7 (19%)	n=12 (33%)	n=12 (33%)	2.9	2.9
Friendship							
Utilization	n=1 (3%)	n=4 (11%)	n=7 (19%)	n=15 (42%)	n=9 (25%)	2.8	2.8
Benefit	n=1 (3%)	n=4 (11%)	n=9 (25%)	n=12 (33%)	n=10 (28%)	2.7	2.8

Figure 1a. Correlation Results for Career Development Mentoring Functions

Correlation for Sponsorship

		UtilizeSponsor	BenefitSponsor
UtilizeSponsor	Pearson Correlation	1	.507**
	Sig. (1-tailed)		.002
	N	30	30
BenefitSponsor	Pearson Correlation	.507**	1
	Sig. (1-tailed)	.002	
	N	30	30

**. Correlation is significant at the 0.005 level (1-tailed).

Correlation for Exposure-and-Visibility

		UtilizeExp	BenefitExp
UtilizeExp	Pearson Correlation	1	.284
	Sig. (1-tailed)		.068
	N	29	29
BenefitExp	Pearson Correlation	.284	1
	Sig. (1-tailed)	.068	
	N	29	29

Correlation for Coaching

		UtilizeCoach	BenefitCoach
UtilizeCoach	Pearson Correlation	1	.583**
	Sig. (1-tailed)		.000
	N	34	34
BenefitCoach	Pearson Correlation	.583**	1
	Sig. (1-tailed)	.000	
	N	34	34

**. Correlation is significant at the 0.005 level (1-tailed).

Figure 1a. (Continued) Correlation Results for Career Development Mentoring Functions

Correlation for Protection

		UtilizeProtect	BenefitProtect
UtilizeProtect	Pearson Correlation	1	.376*
	Sig. (1-tailed)		.029
	N	26	26
BenefitProtect	Pearson Correlation	.376*	1
	Sig. (1-tailed)	.029	
	N	26	26

*. Correlation is significant at the 0.05 level (1-tailed).

Correlation for Challenging Assignments

		UtilizeChallenging	BenefitChallenging
UtilizeChallenging	Pearson Correlation	1	.599**
	Sig. (1-tailed)		.000
	N	31	31
BenefitChallenging	Pearson Correlation	.599**	1
	Sig. (1-tailed)	.000	
	N	31	31

**. Correlation is significant at the 0.005 level (1-tailed).

Figure 2a. Correlation Results for Psychosocial Mentoring Functions

Correlation for Role Modeling

		UtilizeRole	BenefitRole
UtilizeRole	Pearson Correlation	1	.564**
	Sig. (1-tailed)		.000
	N	36	36
BenefitRole	Pearson Correlation	.564**	1
	Sig. (1-tailed)	.000	
	N	36	36

**. Correlation is significant at the 0.005 level (1-tailed)

Correlation for Acceptance-and-Confirmation

		UtilizeAccept	BenefitAccept
UtilizeAccept	Pearson Correlation	1	.563**
	Sig. (1-tailed)		.000
	N	36	36
BenefitAccept	Pearson Correlation	.563**	1
	Sig. (1-tailed)	.000	
	N	36	36

**. Correlation is significant at the 0.005 level (1-tailed).

Correlation for Counseling

		UtilizeCounsel	BenefitCounsel
UtilizeCounsel	Pearson Correlation	1	.635**
	Sig. (1-tailed)		.000
	N	36	36
BenefitCounsel	Pearson Correlation	.635**	1
	Sig. (1-tailed)	.000	
	N	36	36

**. Correlation is significant at the 0.005 level (1-tailed).

Figure 2a. (Continued) Correlation Results for Psychosocial Mentoring Functions

Correlation for Friendship

		UtilizeFriend	BenefitFriend
UtilizeFriend	Pearson Correlation	1	.645**
	Sig. (1-tailed)		.000
	N	35	35
BenefitFriend	Pearson Correlation	.645**	1
	Sig. (1-tailed)	.000	
	N	35	35

**. Correlation is significant at the 0.005 level (1-tailed).