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# Set Up for Success: An Examination of the Ronald E. McNair Postbaccalaureate Achievement Program's Mentoring Component

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The University of Southern Mississippi

SET UP FOR SUCCESS: AN EXAMINATION OF THE RONALD E. MCNAIR  
POSTBACCALAUREATE ACHIEVEMENT PROGRAM'S  
MENTORING COMPONENT

by

Dwuena Cene' Wyre

Abstract of a Dissertation  
Submitted to the Graduate School  
of The University of Southern Mississippi  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy

May 2011

## ABSTRACT

# SET UP FOR SUCCESS: AN EXAMINATION OF THE RONALD E. MCNAIR POSTBACCALAUREATE ACHIEVEMENT PROGRAM'S MENTORING COMPONENT

by Dwuena Cene' Wyre

May 2011

Often, individuals are set up to fail. However, effective mentoring can set individuals up to succeed. This nonexperimental cross-sectional, predictive study examines the Ronald E. McNair Postbaccalaureate Achievement Program's mentoring component. Specific focus is placed on faculty mentor competency and its impact on McNair student intent to attain a doctoral degree and awareness of graduate school.

Cohen's (1993, 1995) Principles of Adult Mentoring Scale-Postsecondary Education Scale is utilized to assess McNair student perceived faculty mentor competency. Carrera's (2002) measures of effectiveness for the McNair Program's mentoring component are also used in this study.

Sequential multiple regression is the employed method of analysis. Study results indicate faculty mentor relationship emphasis, information emphasis, and student vision competency scores are statistically significant in predicting McNair student "intent to attain a doctoral degree" ( $R^2 = .106$ ,  $F [10, 59] = 2.732$ ,  $p = .008$ ) and "awareness of graduate school" ( $R^2 = .282$ ,  $F [10, 58] = 4.359$ ,  $p = .001$ ), when controlling for GPA and parental education levels.

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A Dissertation  
Submitted to the Graduate School  
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in Partial Fulfillment of the Requirements  
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May 2011

## DEDICATION

This work is dedicated to my beloved, departed grandparents, Bertran Wyre, Sr. and Willie Mae Wright Wyre, who believed education was important and to my “mama Burn” and kindergarten teacher, Burnadean W. Warren.

I also dedicate this project to all those who continuously encouraged and/or prayed for me including my family, my Greenfield Baptist Church (Hammond, LA) family, friends, and colleagues. Additional thanks to Jacquelyn Warren and Mr. and Mrs. Bertran Wyre III for “rent free” transitory housing; Mr. and Mrs. Bertran Wyre II for a permanent mailing address; Andrea Baham, PD, RPh. who literally proofread *every* paper I wrote for the last 4 ½ years; and Little Miss Skylar Peltier who gave me good laughs and hugs this past year when needed.

Last and certainly not least, I dedicate this work to any and everybody who is not afraid to step out of their comfort zone to explore the boundless possibilities of their potential in order to increase their human capital.

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## CHAPTER I

### INTRODUCTION TO THE STUDY

#### Background

Individuals attribute their success and achievement to a variety of factors. Often, mentoring is listed as a contributing factor to success and achievement. Today, numerous programs incorporate the practice of mentoring as a strategy to aid in the growth and development of individuals. One such program that utilizes mentoring as a developmental tool is the Ronald E. McNair Postbaccalaureate Achievement Program (McNair Program). The McNair Program is a federally funded program named in honor of the deceased Challenger Space Shuttle astronaut and acclaimed physicist Dr. Ronald E. McNair. The McNair Program prepares students from underrepresented segments of society for doctoral studies (U.S. Department of Education, 2010). Through a variety of activities, the McNair Program exposes students to the rigor of graduate school and provides students an opportunity to develop personal and professional relationships with faculty members.

The McNair Program may be viewed as a workforce planning tool, which helps to establish the future workforce in America. The McNair Program is also an example of workforce development. The McNair Program promotes individual opportunity, which is considered a mission of workforce education (Gray & Herr, 1998). The practice of mentoring aids in the development of McNair participants by preparing them for graduate studies. Preparation for graduate studies may include assistance with the selection of a graduate school, assistance with the

graduate school application process, exposure to cultural and social events, and assistance with conducting and presenting research. While in the McNair Program, students are paired with university faculty members to mentor them. According to Vincent and Broussard (1998), responsibilities of the mentor in the McNair Program include holding initial discussions with the student to define their research project; holding supportive discussions during the project to help resolve problems and come to conclusions; reviewing and critiquing the final research project report; and scheduling the defense of the research. Even though these tasks may sound typical of work a university professor may do in his or her role as a faculty member, the emphasis and difference is that the faculty member functions in the role of mentor and is expected to assist and support the McNair Program participant with conducting research. Through the mentor's guidance and support, the McNair Program participant is also encouraged to attend and complete graduate school.

### Conceptual Underpinnings for the Study

The practice of mentoring traces its beginnings back to Homer's *Odyssey* (Cohen, 1995; Dolaz, 1986, 1999; Kram, 1980; Jacobi, 1991; Murray & Owen, 1991). Mentoring has become a world-wide phenomenon and utilized by several organizations as either a developmental tool or performance intervention. The federally-funded McNair Program utilizes mentoring as a developmental tool to assist students during their enrollment in the program.

Due to the widespread usage of mentoring, research on the topic exists to help improve its effectiveness and promote its value. While some notable researchers (Kram, 1980; Murray & Owen, 1991; Phillips-Jones, 1978)

specifically focus on mentoring in the workplace, other distinguished researchers (Carrera, 2002; Cohen, 1993, 1995; Cracco, 2007; Dolaz, 1986, 1999; Galbraith & Zelenak, 1991; Vincent & Broussard, 1998) examine mentoring in an educational setting.

Cohen's (1993) groundbreaking research serves as a pivotal step towards helping faculty mentors in their professional development as mentors of adult learners in higher education. Prior to Cohen, mentoring research did not specifically focus on the faculty mentor and faculty mentors had no objective means of assessing their plausible competency as being a mentor of adult learners. According to Cohen (1993), this was an undeniable problem in the evolution of mentoring programs on college campuses. As a response to this keen observation, Cohen developed and validated the Principles of Adult Mentoring Scale, a tool which assesses the competency of faculty mentors. This tool allows mentors to self-assess their mentor competency regarding the mentor's role, general behavioral functions, and mentor-initiated actions.

Cohen adopted Galbraith and Zelenak's (1991) transactional framework theory to support the mentor competency self-assessment tool. In their work, Galbraith and Zelenak maintain that mentoring should be included within the transactional framework of adult learning because learners are considered partners in the educational encounter and assume responsibility for their own learning and behavior. In essence, Galbraith and Zelenak view the mentoring relationship as a partnership in learning because it is a transaction between the mentor and adult learner.

To establish the Principles of Adult Mentoring Scale (faculty mentor competency self-assessment tool), Cohen (1993) defines the transactional process of learning as “an interpersonal interaction between higher education faculty and adult learners characterized by collaborative participation in the educational experience and mutual reflection about the process and results of learning. Assumptions are examined, necessary changes identified and appropriate actions encouraged ensuring growth” (p. 73). Fundamentally comprised of discrete factors, Cohen’s tool assesses the faculty mentor’s competency based on the interactive and evolving process of mentoring.

The interaction, communication, collaboration, partnering, and modeling involved in the mentoring process play a significant role in the manifestation of the Principles of Adult Mentoring Scale. The Principles of Adult Mentoring Scale (Cohen, 1993, 1995) assesses six areas of competency: a) Relationship Emphasis, b) Information Emphasis, c) Facilitative Focus, d) Confrontive Focus, e) Mentor Model, and f) Student Vision.

Some researchers specifically focus on the practice of mentoring and its utilization in an educational setting. Carrera (2002) examines the mentoring component of the McNair Program, which is administered by colleges and universities in the U.S. Carrera hypothesizes that Kram’s (1980) mentoring functions positively contribute to the effectiveness of the McNair mentoring component. The measures of effectiveness were based on the goals and objectives of the McNair Program. The measures in the study include a) intention to attain a doctoral degree; b) awareness of the graduate school

experience; c) knowledge of research; and d ) knowledge of professional organizations and conferences.

Kram's (1980) work serves as foundational to the works of Cohen and Carrera. Kram, highly referenced throughout the literature on mentoring, developed the characteristics of mentoring relationships and a descriptive theory on mentoring. According to Kram, the mentoring relationship progresses through four distinct phases (initiation, cultivation, separation, and redefinition). Kram further states that the principle relationship dynamics changes over time and that the changes are reflected over time in each phase.

#### Statement of the Problem

The goal of the McNair Program is to increase the number of doctoral degrees earned by students from underrepresented sectors of society (U.S. Department of Education, 2010). According to the U.S. Department of Education (2010), the multi-million dollar federally funded program prepares participants for doctoral studies.

As stated in the Code of Federal Regulations (2009), institutions may provide a variety of activities and services to help McNair students prepare for the rigor of graduate school. Approved activities and services include opportunities for research, summer internships, seminars, tutoring, academic counseling, assistance in securing admissions and financial aid for graduate school, *mentoring programs*, and exposure to cultural events and academic programs (Code of Federal Regulations, 2009). During the course of the four-year project/grant period, colleges and universities work closely with participants as they complete undergraduate studies. The institutions strongly encourage



participants to enroll in graduate programs and track progress to the successful completion of advanced degrees. Hence, program activities align with the overall goal of the McNair program—increasing the number of doctoral degrees earned by underrepresented sectors of society.

Despite the fact that mentoring is widely practiced in communities, and accepted in the workplace as an effective intervention, a gap still exists in the research that specifically addresses mentor competencies. Previous research on mentoring focused on mentoring relationships in general (Levinson, Darrow, Klein, Levinson, & McKee, 1978), the process or stages of mentoring (Kram, 1980), mentoring in the workplace (Kram, 1980; Murray & Owen, 1991; Phillips-Jones, 1978) and in higher education (Carrera, 2002; Cohen, 1993, 1995; Cracco, 2007; Dolaz, 1986, 1999; Galbraith & Zelenak, 1991; Vincent & Broussard, 1998). Although previous research may have improved the efficiency and effectiveness of formal mentoring processes and the competency of mentors in general, minimal research exists on the mentoring component of the McNair Program. Research specifically focusing on the mentoring component of the McNair Program includes the work of Carrera (2002) and Vincent and Broussard (1998). Although the research of Carrera and Vincent and Broussard examines the mentoring component of the McNair Program, the scope of these works do not include a review or examination of the faculty mentor's competency.

In fiscal year 2009, the federal government allocated approximately \$47,298,189 to fund 200 McNair programs nationwide that would service 5,430 students (U.S. Department of Education, 2010). To monitor performance, the

U.S. Department of Education tracks graduate school enrollment rates and undergraduate completion rates for program participants. Although these current measures focus on output, no standard measures or practices appear to exist which focus on the mentoring component.

During the McNair Program, mentors are entrusted to support, expose, guide, and teach the McNair scholars to conduct thorough, rigorous research. The caliber of mentors and mentor match to mentee strongly influences the success of formal mentoring. According to Cohen (1995), mentors viewed as credible can more effectively interact with adult learners to enhance their intellectual and affective (emotional) development. Mentor competency remains important regardless of where the mentoring occurs—on a college campus, in the workplace, in the community, or in the home.

Esler's (1998) study of the McNair Program provides a systematic, comprehensive method for evaluating the McNair Program; however, the mentoring component was not the primary focus, leaving a research gap for the McNair Program mentoring component. This gap in the research regarding the mentoring component is important because the McNair Program places significant emphasis on the mentor's critical role.

Previous research maintains mentoring has a positive impact on individuals and aids in their development or achievement (Cracco, 2007; Levinson et al., 1978; Dolaz, 1986, 1999; Vincent & Broussard, 1998). Past McNair Program research includes establishing a method to evaluate the program as a whole (Esler, 1998). Minimum research exists which specifically

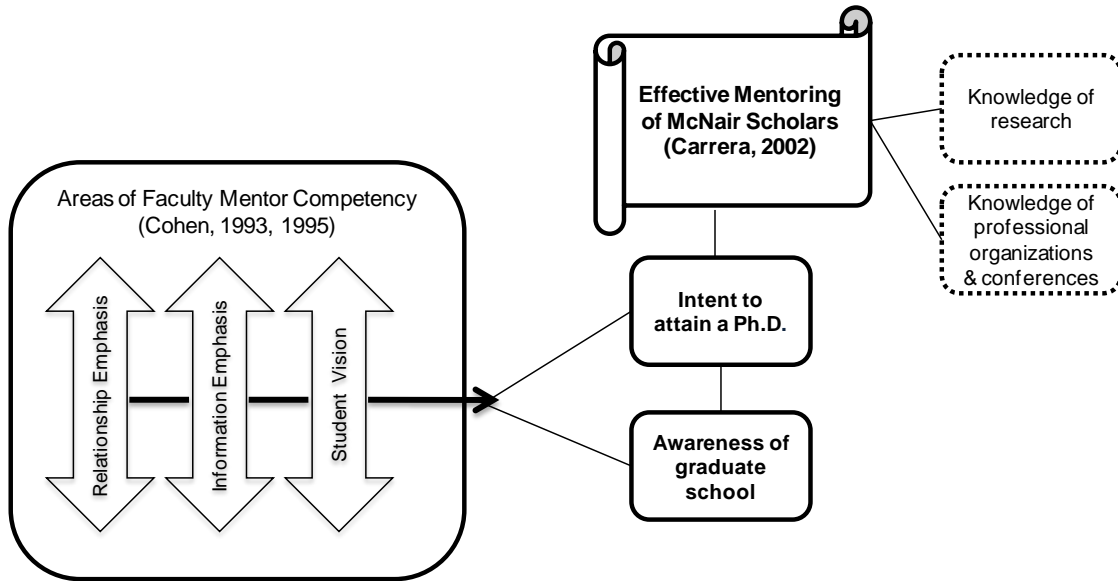
focuses on the McNair Program's mentoring component (Carrera, 2002; Vincent & Broussard, 1998). Previous research focusing on the mentoring component excludes attention to mentor competency level and how it impacts the participant's perceived success based on McNair Program goals.

On the surface, the McNair Program appears as a viable workforce development tool which provides needed assistance and support to first-generation college students and other underrepresented groups. Prior research establishes mentoring as a widely accepted developmental tool. Yet, no McNair Program mentoring component best practices and minimum requirements are provided for college and university McNair Programs by the federal government (Code of Federal Regulations, 2009). For these reasons, the value, quality, and benefit mentoring provides to the McNair Program should be explored. Additional research is needed on the subject in order to assess the quality of the mentoring and to help develop guidelines and best practices for the McNair Program mentoring component. Further research is also needed on the subject of McNair Program faculty mentor competency and its impact on McNair participants.

#### Purpose of the Study

The purpose of this research is to examine the relationship between the McNair Program faculty mentor competency (Cohen, 1993, 1995) and the perceived success of students based on the goals of the McNair Program as defined by Carrera (2002). This research will discover the extent faculty mentor relationship emphasis competency, information emphasis competency, and

student vision competency predicts the McNair Program student intent to attain a doctoral degree and awareness of graduate school. Figure 1 illustrates the conceptual framework for this study.



*Figure 1.* Conceptual Framework: Three competency areas and McNair Program mentoring component measures of effectiveness.

To achieve the purpose of this study, the following hypotheses will be investigated:

**Hypothesis 1:** Faculty mentor relationship emphasis competency, information emphasis competency, and student vision competency scores can significantly predict the McNair Program student intent to attain a doctoral degree, controlling for GPA and parental education levels.

**Hypothesis 2:** Faculty mentor relationship emphasis competency, information emphasis competency, and student vision competency scores can significantly predict the McNair

Program student awareness of graduate school, controlling for GPA and parental education levels.

#### Limitations, Delimitations, Assumptions, and Significance of Study

##### *Limitations*

The utilization of mentoring as a developmental tool and as a performance intervention has increased over the past decade. While numerous individuals acknowledge benefits from a mentoring experience, limitations to the current research exist, including the lack of:

1. comparison made of similarly situated students on college campuses not enrolled in the McNair Program,
2. comparison made of McNair students not paired with mentors,
3. program-wide standards for the McNair Program mentoring component, and
4. consistency of McNair student program experience in the study (students at different stages in their tenure in the McNair Program).

##### *Delimitations*

Delimitations exist for the current research. Delimitations include:

1. mail survey used to collect data, and
2. competency self-assessment by McNair Program faculty mentors.

In anticipation of a general lack of faculty mentor availability, student perceptions of faculty mentor competency are used instead of faculty mentor perceptions. A web survey is chosen instead of a traditional mail survey, which increases the potential for lower response rate (Dillman, Smyth, & Christian, 2009). The survey

is sent indirectly to subjects, as to avoid violating privacy laws or McNair Program requirements. This is also considered a delimitation of the current research.

### *Assumptions*

Various assumptions exist within the current study. The current researcher assumes a) all students in the McNair Program were screened and eligible to participate in the McNair Program, b) the students are bona fide participants of the McNair Program, and c) the faculty mentors paired with the McNair participants are aware of their role and responsibility as a mentor in the McNair Program by some measure offered to them by the university operating the program.

### *Significance of Study*

Previous research (Carrera, 2002) on the McNair Program's mentoring component primarily focused on the McNair participant perception of success of the mentoring component. However, Carrera's (2002) work did not include studying the impact or role of the mentor competency. The current study will expand upon Carrera's (2002) evaluation of mentoring by incorporating the mentor competency as an element of study. By doing so, a gap in the literature regarding the McNair Program's mentoring component will narrow. This research also adds to the collective body of work on mentoring.

The results of this study will offer information to a variety of stakeholders, including the U.S. Department of Education, McNair Program directors, program participants, and faculty mentors for the purpose of enhanced awareness of the value and significance of the mentoring component. Ultimately, this study may

unveil the need to purposefully focus on faculty mentor competency and its impact on the students they mentor.

#### Definition of Key Terms

The growth and acceptance of mentoring is rooted in the fields of education, management and organizational behavior, and psychology. Such history led to the evolution of a variety of definitions and commonly used lexicon within the practice. The following definitions will be used in the current study. Cohen's definition of "mentoring" and "transactional process" of learning are derived from Galbraith and Zelenak (1991). Cohen's (1993) definitions will be used in this research.

*Mentoring.* A one-to-one transactional relationship between higher education faculty and adult learners within a college environment. Faculty mentors interact with students for the purpose of (ideally) developing their intellectual, affective, and career potential (Cohen, 1993).

*Transactional Process of Learning.* An interpersonal interaction between higher education faculty and adult learners characterized by collaborative participation in the educational experience and mutual critical thinking and reflection about the process of results learning. Assumptions are examined, necessary changes identified, and appropriate actions encouraged to promote personal growth (Cohen, 1993).

*Mentor.* The individual who purposefully works with a less experienced individual to aid in the growth and development of the less experienced individual.

*Mentee.* A less experienced individual who pairs with a mentor in order to aid in his or her growth and development. This role is also commonly known as a protégé. Both terms are used interchangeably within the current work.

### Summary

Each year, the federal government invests millions of dollars to support the McNair Program. The overall goal of the McNair Program is to increase the number of doctoral degrees obtained by individuals from underrepresented segments of society. Although there is no guarantee that the target population receiving the services offered through the McNair Program will attain a doctoral degree, specific strategies are utilized to prepare participants for doctoral studies.

The practice of mentoring is considered a valuable tool to perpetuate student growth and development. Mentoring is a strategy employed by the McNair Program to support program participants. The majority of past research has targeted the practice of mentoring in general. Such research, which promotes the practice of mentoring, contributes to mentoring's widespread acceptance. Minimal research exists on the mentoring component of the McNair Program. One may be inclined to rationalize a mentoring experience in the McNair Program impacts the effectiveness of the McNair Program's mentoring component, and that the mentoring experience influences the mentee's outlook and their decisions regarding their educational future. To gain more insight into this phenomenon, the current work examines the relationship between perceived mentor competency and the perceived success of the McNair Program participant based on the goals of the McNair Program's mentoring component.



The following chapters consist of a review of literature, the research design and methodology, study results, and research discussion. A review of the literature allows the reader to gain an awareness of the origins of the practice of mentoring, as well as an awareness of the theory, practice, and research concerns of mentoring. Specific attention is given to mentoring in higher education with a particular focus on the faculty/mentor competency model and the McNair mentoring component. The research design and methodology chapter will outline and explain the methods used to conduct this study. A description of study respondents and study results are presented, followed by a discussion of the research which concludes with implications for future research.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

#### Introduction

Mentoring is a widely accepted practice in today's society. It has a rich history and has helped many famous, not so famous, and infamous people choose their craft. Such individuals even attribute much of their success to their mentors. People who have benefited from mentoring have entered the professions of law, medicine, education, engineering, business, journalism, and public service to name a few.

The following review of literature will trace the origins of mentoring; distinguish the practice of mentoring; explore the theory, practice, and research concerns of mentoring; and examine mentoring in higher education with a particular focus on the faculty/mentor competency model and the Ronald E. McNair mentoring component.

#### Origins of Mentoring

In order to understand modern mentoring theory and practices, it is important to understand the origins of mentoring. Modern scholars and researchers (Cohen, 1995; Dolaz, 1986, 1999; Kram, 1980; Jacobi, 1991; Murray & Owen, 1991) attribute the universally known concept of mentoring to the ancient Greek poet Homer. In the *Odyssey*, arguably Homer's most famous work, the first "mentoring" relationship is formed and nurtured. According to Murray and Owen (1991), the Greeks based mentoring relationships on one basic, underlying principle--human survival. In essence, the Greeks believed that

humans learn skills, culture, and values directly from other humans whom they look up to or admire. While the mentoring described and illustrated in Homer's *Odyssey* was the beginning of mentoring relationships, today there are countless mentoring dyads interacting, communicating, debating, deliberating, and celebrating all over the world.

Interestingly enough, Murray and Owen (1991) point out that the principles of modeling and mentoring have been key elements in the continuity of art, craft, and commerce from ancient times. Demonstrating this notion, Murray and Owen reference the craft guilds that began in the Middle Ages. As explained by Murray and Owen, these societies helped structure the professions of merchant, lawyer, goldsmith, and many more.

Murray and Owen (1991) vividly explain how young boys were traditionally groomed for a profession by being apprenticed to a master (person who was considered excellent in his trade and who owned a shop or business). The young boy lived with the master, labored his way to the journeyman level of the designated trade, and finally became a master himself. The mastery level was attained by taking an examination or producing exemplary work (Murray & Owen, 1991). The exemplary work produced was known as a masterpiece. Ultimately, according to Murray and Owen (1991), the master/apprentice relationship progressed into the employer/employee relationship by industrial society.

As previously stated, the practice of mentoring is now widespread throughout the world. Further review of the subject will provide insight into how

the practice has advanced and is employed to aid in the growth and development of human capital.

### Distinguishing Mentoring

#### *Distinctions in General*

Although mentoring has its origins in Greek mythology, its popularity and widespread utilization has taken it from Homer's *Odyssey* into the 21<sup>st</sup> century. As Murray and Owen (1991) point out, only in recent decades has the term mentor been widely used by organizations. Murray and Owen further explain that previous works (i.e., Levinson et al., 1978) used terms such as coach, adviser, senior adviser, counselor, and experience leader to brand the mentor.

Other researches such as Dolaz (1986) refrain from using numerous terms to brand the mentor. Dolaz simply views the mentor as a guide and refers to the mentor as such. Dolaz provides insight into this concept by stating that the mentor leads individuals along the journey of their lives. Dolaz further adds that mentors are trusted because the mentor has experienced the trials and barriers facing the mentee. As Dolaz sees it, the mentor has experience and this experience perpetuates trust.

Even though numerous terms have been used to brand the mentor, and no one term is deemed superior to any other, Murray and Owen share additional terms in which the mentor is also referred. According to Murray and Owen (1991), other examples of terms used to refer to the mentor in facilitated or formal mentoring programs include master, guide, luminary, trainer, instructor, leader, and boss. Correspondingly, Murray and Owen (1991) share terms used

to refer to the protégé. These include, but are not limited to, mentee, candidate, apprentice, aspirant, advisee, counselee, trainee, and student. Not surprisingly, less popular terms used to refer to the protégé include follower, subordinate, applicant, hopeful, and seeker (Murray & Owen, 1991).

To their credit, Murray and Owen point out that the activities in which the mentor and mentee engage in are different from the casual interactions that spontaneously occur with role models and sponsors. Murray and Owen expand this idea by stating that a mentor carries out functions (i.e., role modeling and sponsoring) in a manner that is structured around the skills that a protégé or mentee *wants to develop*. As an extension of their view, Murray and Owen also maintain that in facilitated mentoring (also known as formal mentoring) there is typically a one-to-one mentor to mentee ratio. Such concepts are not necessarily true if the more experienced individual in the relationship is purely considered to be a sponsor or role model. As rationalized by Murray and Owen (1991), a sponsor can be an active booster or advocate for any number of people at the same time. The sponsor, in Murray and Owen's analysis, is constrained only by time and generosity. If one is a sponsor, he or she knows who is being sponsored. However, the individual being sponsored may have many sponsors and incidentally may not know the sponsors. The sponsor's responsibility can continue indefinitely or as long as the sponsor sees the need or is willing and able to continue in that role.

On the other hand, the role model can function in the same manner as a sponsor. Yet, the role model may be held in high regard by numerous people

without knowing of his or her esteemed status (Murray & Owen, 1991).

Conversely, an individual may have multiple role models at one time. Murray and Owen maintain that there is no structure for the role modeling relationship, and that it can last as long as the observer perceives the individual to exhibit positive behaviors he or she desires to emulate.

Table 1 outlines the differences, as specified by Murray and Owen (1991), between a mentor, sponsor, and role model.

Table 1

*Mentor, Sponsor, and Role Model Differences*

Role	Task/Function	Activities
Mentor	Sponsor, role model, coach	<ul style="list-style-type: none"> <li>Acts as source of information</li> <li>Provides insight into organization's philosophy of human resource development</li> <li>Tutors specific skills, effective behavior, and how to function in the organization</li> <li>Gives feedback on observed behaviors</li> <li>Serves as confidant</li> <li>Assists in plotting career path</li> <li>Meets with protégé at agreed times and intervals for feedback and planning</li> <li>Agrees to a no-fault conclusion of the mentoring relationship when (for any reason) time is right</li> <li>Maintains the integrity of the relationship between the protégé and the natural boss</li> </ul>

Table 1 (continued).

Role	Task/Function	Activities
Sponsor	Booster or advocate	<ul style="list-style-type: none"> <li>Makes introductions to top people in organizations</li> <li>Makes introductions to others with influence in the industry or profession</li> <li>Makes recommendations for advancement</li> <li>Publicly praises sponsored person's accomplishments and abilities</li> <li>Facilitates entry into meetings and activities usually intended for higher level people</li> <li>Serves as confidant</li> <li>Offers guidance in the customs of the organization</li> </ul>
Role Model	Reflector of positive behaviors to emulate	<ul style="list-style-type: none"> <li>Exhibits:</li> <li>Success</li> <li>Exemplary behavior in achievement and style</li> <li>Ability to get things done</li> <li>Knowledge of organizational policy and philosophy</li> <li>Enjoyment of position and accomplishment</li> </ul>

### *Distinctions in Higher Education*

Through Murray and Owen's (1991) work, the mentor is distinguished from a role model and sponsor. One should keep in mind that these are two roles which can be found in any organization, field, or industry. However, Cohen's (1995) distinction of the mentor's role and function is based on their presence in academia. Unlike Murray and Owen, Cohen's distinction of the mentor is not generically associated or loosely tied to academia, as it specifically seeks to distinguish a mentor from other roles and occupations on a college campus. Roles and occupations in academia which Cohen distinguishes from a mentor include academic advisers and counselors.

According to Cohen (1995), the complete mentor role is defined as containing six core functions. These include the relationship emphasis, information emphasis, facilitative focus, confrontive focus, mentor model, and mentee vision. Additionally, Cohen states the mentor's commitment to assist in the developmental growth of another person requires a substantial personal investment over an extended period of time. By contrast, Cohen asserts that a typical academic adviser in postsecondary education is not generally expected to engage in frequent or lengthy meetings. Accordingly, such meetings, when they occur, are generally limited to topics of discussion related to academics (i.e., grades, selection of courses, and scheduling) (Cohen, 1995).

Whereas the academic adviser primarily will focus on issues related to grades, selection of courses, and scheduling, if the academic adviser perceives that the student is having problems which are negatively impacting their academic performance, the academic adviser will likely refer the student to a counselor (Cohen, 1995). The counselor in postsecondary education is typically trained and has counseling credentials, which allows them to help the student overcome the barriers preventing or derailing successful academic performance.

In short, the mentor performs roles and functions that are similar to a role model, sponsor, counselor and academic adviser. However, the mentor's role is broader and encompasses all of the previously stated roles and much more. The mentor is further distinguished by their commitment of time, which can be quite lengthy when considering that the mentoring relationship can last for several years as described by Kram (1980). Moreover, it is important to distinguish the



role of the mentor due to the uniqueness of the mentoring relationship and the overlapping nature of the mentor's role with other roles that are viewed as supportive and having a positive impact on an individual's development.

### Mentoring Theory

For decades, this magical and transformational relationship (Dolaz, 1999) has been studied by numerous researchers (Cohen, 1993, 1995; Dolaz, 1986, 1999; Galbraith & Zelenak, 1991; Kram, 1980; Levinson, Darrow, Klein, Levinson, & McKee, 1978; Phillips-Jones, 1978) seeking to advance the knowledge of adult development. As the practice of mentoring has become more widespread in organizations, research on mentoring has also expanded. Through the years, countless researchers examined mentoring and rendered findings to support mentoring theories and conclusions. However, for the purposes of the current research, applicable mentoring theory and research is categorically described in this work as either foundational or transactional.

#### *Foundational Mentoring Theory*

Noteworthy, distinctive, and foundational are words that can be used to describe Kram's research on mentoring. During the time of Kram's research, minimal study had commenced on mentoring in general, and even less existed in the area of mentoring in the workplace. Only Phillips-Jones (1978) had completed research on mentors and protégés, which specifically focused on the career development of women managers and executives in business and industry. Phillips-Jones is referenced by Kram (1980), and other sources credited Phillips-Jones for completing the first dissertation focusing on the

process and skills of the mentoring (The Mentoring Group, 2009). Therefore, it is understandable why Kram choose an exploratory research method that would generate theory and hypotheses. Kram's explanation is clear regarding her research methodology choice. Kram (1980) states that since the research topic under review involved the investigation of a phenomenon relatively unexplored to date, an exploratory research method was required rather than a method that would test an existent theory and set of hypotheses.

Pioneering research such as Kram's work should be mentioned when examining the mentor and mentee relationship. Kram's (1980) research is important because it addresses three specific areas of the mentoring relationship. First, Kram seeks to determine the essential characteristics of a developmental relationship. In order to determine the characteristics, Kram concludes that the best way to study the relationship is by examining what goes on in the relationship as it transpires in an organizational context. Although this is the overarching question (What are the essential characteristics of a developmental relationship?), Kram has numerous questions of particular interest, which also align with her first research question. Further, Kram is careful to note that in order to discover and identify the characteristics of a developmental relationship, the mentoring relationship in an organization must be distinguished from other relationships in the organization. Kram used personal accounts (interviews) from mentoring dyads in a large Northwestern public utility company with 15,000 employees to uncover reoccurring patterns and themes that help to explain what actually happens in the mentoring relationship.

Kram's second primary research question, also significant to mentoring research, is "How does each individual manager influence the course of a developmental relationship?" Hence, this question beckons the current researcher to wonder if the actions of the mentor determine the outcome of the mentoring relationship. Kram divulges that the first research question addresses the mentoring process and that the second question addresses the intrapersonal process that may influence the course of a developmental relationship. In essence, Kram's second research question seeks to examine the individual's influence on a developmental relationship. Perhaps unbeknownst to Kram, but very incisive nonetheless, Kram sets the stage for the need of future study on the mentor's competencies.

Naturally, Kram's third question follows suit and focuses on the influence an organization has on a developmental relationship. The purpose of Kram's third research question (How does the organizational context influence the course of a developmental relationship?) is to explore how features of the organization influence individual behavior in the context of the developmental relationship. Finally, Kram suggests that the hierarchical structure, perceptions of opportunity, task design, reward structure, organizational socialization processes, salient group identities, and organizational strategies for managing individual careers might influence what is observed in a developmental relationship from an organizational context.

Overall, Kram endeavors to examine the essential characteristics of a developmental relationship. Secondary to Kram's primary purpose, as previously

stated, was to uncover why a developmental relationship is important to the individuals involved, and how the organizational context in which it occurs impacts its course. Kram's extensive study resulted in a descriptive theory of developmental (mentoring) relationships.

Due to Kram's formulation of a descriptive theory on mentoring relationships, Kram's work cannot be taken lightly or overlooked when examining mentoring. For this reason, Kram's work is considered foundational and essential to understanding mentoring relationships by many researchers. The essential characteristics of a mentoring (or developmental) relationship were discovered by Kram through extensive study. According to Kram (1980), the mentoring relationship phases include a) initiation, b) cultivation, c) separation, and d) redefinition. Kram's descriptive theory on mentoring maintains that the principle relationship dynamics changes over time and that the changes are reflected over time in the phases of initiation, cultivation, separation, and redefinition. The phases or essential characteristics of a mentoring relationship are defined by Kram (1980) as follows:

Initiation – a period of six months to a year during which time the relationship gets started and begins to have importance for both managers;

Cultivation – a period of two to five years during which time the range of career and psychosocial functions provided is expanded;

Separation – a period of six months to two years after a significant change in the structural role relationship and/or in the emotional experience of the relationship; and

Redefinition – An indefinite period after the separation phase, during which time the relationship is ended or takes on significantly different characteristics, making it a more peerlike friendship. (p. 28)

Another element of Kram's research that is important to this work is the discovery of the psychosocial and career-related functions associated with the mentoring relationship. As Carrera (2002) plainly explains it, the psychosocial components focus on the quality of the relationship between the mentor and protégé. These components include role modeling, acceptance and confirmation, counseling, and friendship (Carrera, 2002). Career-related functions are more reflective of and associated with the mentor's position in the organization, which further involves assisting the protégé or mentee to advance within the organization (Carrera, 2002; Kram, 1980). Providing sponsorship, exposure and visibility, coaching, protection, and challenges are examples of career-related functions in the mentoring relationship (Carrera, 2002).

As Kram's work is highly referenced throughout the literature on mentoring, Kram is rightfully credited for expanding the literature and body of knowledge of mentoring. However, one must recognize that Kram's work builds upon the work of Levinson, Darrow, Klein, Levinson, and McKee (1978). Kram intensely cites and incorporates excerpts of Levinson et al. into her work, as it is used as a guide for Kram's research on mentoring relationships.

Levinson et al. (1978) was one of the first works which discussed the mentoring relationship and its importance. During the time when Levinson et al. embarked upon their research, there was no theoretical framework to stimulate and guide the researchers (Levinson et al., 1978). Although Levinson et al. concede that the idea of studying the conception of the life cycle as a whole and providing a detailed picture of development in early and middle adulthood was not novel, until their work the life cycle theory remained curiously neglected (Levinson et al., 1978). The work of Levinson et al. highlighted the importance of mentoring in human development.

In spite of the lack of research on mentoring, Levinson et al. proceeded to conduct a study focusing on the phases of life of adult males and the nature of their development. The subjects were forty men who were between the ages of 35-45. The subjects were equally distributed among four occupations (hourly workers in industry, business executives, university biologists, and novelists). According to Levinson et al., the sampling procedure varied among the four occupations. In addition, all study participants were American born and lived (during the time of the study) in the region between Boston and New York. The participants also varied by social, financial, racial, ethnic, and religious backgrounds. Levinson et al. make certain to point out to readers that it is not by accident that women were excluded in the study. The researchers do concede that similarities exist between the development of women and men; however, Levinson (who appears to be the principle investigator) himself is personally interested in gaining a deeper understanding of his own development. The men

are further distinguished by occupations due to the idea of Levinson et al. that a man's work is the primary base for his life in society and that work is a vehicle for the fulfillment or negation of central aspects of the self (Levinson et al., 1978).

As a result of the extensive study, Levinson et al. contend that the mentoring relationship is vitally important in young adulthood (Kram, 1980; Levinson et al., 1978). Along this line of thought, Levinson et al. (1978) describe the mentor as several years older than the young man and having greater experience and seniority in the world the young man is entering. Levinson et al. concede that in their research they could not find one word to adequately convey the nature of the mentoring relationship. In their opinion, terms such as counselor or guru suggest more subtle meanings but also have other connotations that would be misleading. Interestingly enough, Levinson et al. state that the term "mentor" is typically used in a much narrower sense to denote a teacher, adviser, or sponsor. Therefore, in the research of Levinson et al. the term "mentor" encompasses all these terms and more.

Although not extensively researched during the time of Levinson's et al. foundational research, Levinson et al. attempt to identify the functions or roles of the mentor in the young man's life. These researchers affirm that the primary function of a mentor is to be a transitional figure. According to Levinson et al., the mentor represents a mixture of parent and peer. Paradoxically, the mentor must be both and not purely either one (Levinson et al., 1978). As explained by Levinson et al., this is because if the mentor is purely a peer he cannot represent the advanced level toward which the younger man is striving. As a

consequence, if the mentor is extremely parental, it is difficult for the mentor and the protégé to overcome the generational difference and move toward the peer relationship, which is the ultimate goal of the relationship.

Levinson et al. (1978) also identify additional functions and purposes of a mentor. These additional functions and purposes identified by Levinson et al. are as follows.

Table 2

*Mentor Functions*

Function	Purpose
Teacher	To enhance the young man's skills and intellectual development
Sponsor	To influence and facilitate the young man's entry and advancement
Host/Guide	To welcome the initiate into a new occupational and social world and acquainting the young man with its values, customs, resources, and cast of characters
Exemplar	To provide the protégé with an example to admire and seek to emulate
Counselor	To provide moral support in time of stress

Another intriguing element of Levinson's et al. research is the theory that the young male (protégé) initially views himself as a novice or apprentice to the more authoritative adult (mentor). As the relationship evolves, so does the theory of Levinson et al. The theory further states that as the relationship evolves the protégé gains a fuller sense of his individual authority and his capability for autonomous, responsible action. Accordingly, the young man



encounters his own experiences, which makes the relationship between the pair more mutual.

A final conception of Levinson et al. (1978), which is critical in their view, is that when a mentoring relationship is “good enough” the young man or protégé feels admiration, respect, appreciation, gratitude and love for the mentor. Hence, the researchers assert that these harmonious feelings outweigh (not entirely prevent) feelings of resentment, inferiority, envy, and intimidation. In reality, as pointed out by Levinson et al., the young man or protégé may experience a mix of emotions ranging from ineptness to equal colleague to rising star who will someday soar to greater heights beyond the mentor’s level. It is important to note that even though negative feelings may emerge, due to the protégés’ mix of emotions that surface during the course of the relationship, a constructive mentoring relationship allows the mentor to play a significant role in the protégés’ development.

As pointed out by Levinson et al., all mentoring relationships are not constructive. The researchers are sensible to educate readers by letting them know that an intense mentoring relationship may end with strong conflict and bad feelings on both sides. Such destructive mentoring relationships may leave the protégé with feelings of bitterness, rancor, grief, and even abandonment. Accordingly, feelings of liberation and rejuvenation may also be felt by the protégé at the end of a destructive mentoring relationship. Instead of being admired for fostering the protégés’ individuality and independence, the mentor or older adult is now perceived by the protégé as a tyrannical father or a smothering

mother. At this point, it is clear that the mentoring relationship is no longer positive and the mentor has shifted from cherished mentor to irritating tormentor. Moreover, the once admired and respected mentor is now viewed as being destructively critical and demanding. Needless to say, the mentor's perspective also changes regarding the protégé. The mentor now views the protégé as inexplicably touchy, unreceptive, rebellious, and ungrateful. Levinson et al. further conclude that by the end of a destructive mentoring relationship, there is generally some validity in both the mentor's and protégé's criticism of the other.

Fortunately, Levinson et al. concede that the mentoring relationship ends and that much of its value may be realized after termination, just as with love relationships in general. Based on the research, after separation from the mentor, the protégé may take the admired qualities of the mentor more fully to himself. Levinson et al. further conclude that the protégé's personality is enriched and he makes the mentor a more intrinsic part of himself. Finally, this process is a major source of development of adulthood (Levinson et al., 1978).

Unfortunately, Levinson et al. (1978) also acknowledge that at the time of the study there was little theory and even less research evidence regarding the phases in the life cycle and the nature of adult development. Essentially, the aim of Levinson et al. was to create a developmental perspective on adulthood in men. Further, Levinson et al. suggest that major seasons of adulthood exist and each season has its own intrinsic nature and value. Herein is a link between Levinson et al. (1978) and Kram (1980). Kram's work brought about the essential characteristics of a mentoring relationship, which has phases or stages

distinguished through the progression of the relationship. While Levinson's et al. keystone research established the seasons (i.e., stages) of male adulthood characterizing them by nature and value.

Regarding the seasons of adulthood established by Levinson et al. (1978), these researchers theorized that a change goes on within each season and a transition is required for the shift from one season to the next. Further, every season has its own time and needs to be understood in its own terms.

Accordingly, this theory on seasons during adult development was further studied and extended by Kram into the field of mentoring. As a result, Kram's descriptive theory on the mentoring relationship and its four distinct stages (i.e. seasons) emerged.

Levinson et al. (1978) credit Carl Jung, a follower of Sigmund Freud, as the father of the modern study of adult development. Jung, according to Levinson et al., began the analytical psychology school of thought. Levinson et al. further state that Jung's theory is based on the clinical study of patients and the analysis of ethnography, mythology, and symbolic creations. Jung's work is important because he brought into existence the term "individuation" into modern psychology. Hence, individuation is part of the adult developmental process that begins around age 40 and may extend over the last half of their life cycle (Levinson et al., 1978). Basically, it is the process whereby a person becomes their true self. This stage of life was also part of the extensive study of Levinson et al.

Mentoring began in Homer's *Odyssey*; however, researchers such as Kram and Levinson et al. worked to develop foundational mentoring theory, which led mentoring into the fields of psychology, management, and higher education. The work of these researchers continues to set the standard for mentoring research and continues as highly referenced and utilized by modern researchers to develop new and existing mentoring theory.

#### *Mentoring as a Transactional Process*

Today, modern researchers like Galbraith and Zelenak are leading the way for mentoring to continue as a viable option for developing and enhancing the skills of the current and future workforce. Their works build upon various adult learning theories, which encompasses mentoring theories such as those established by Kram and Levinson et al.

Unlike the mentoring that took place with the master and the apprentice, modern mentoring is highly collaborative and requires the cooperation of both the mentor and mentee. For this reason, mentoring is associated with and often described as a transactional process. Galbraith (1991) asserts that the transactional process of learning is a democratic and collaborative endeavor in which facilitators and learners engage in a mutual act of challenge, critical reflection, sharing, support, and risk-taking. At the core of the transactional process of learning is collaboration. Galbraith conceptualizes that facilitators and learners are full partners in the transactional process of learning. Hence, there is no tyranny or dictatorship in the transactional process of learning. As so it goes with mentoring. The mentor and mentee work together as the relationship

progresses; both bring cooperatives and collaborative dispositions to the relationship. This collaborative partnership moreover reinforces the principles inherent in the transactional process.

Galbraith (1991) states that the most common elements of the transactional process are collaboration, support, respect, freedom, equality, critical reflection, critical analysis, challenge and praxis. Another element or characteristic of the transactional process is accepting responsibility for one's actions and beliefs (Galbraith, 1991). Galbraith further states that the features previously listed hold true for both the facilitator (mentor) and adult learner (mentee). Therefore, when mentoring is established or viewed as a transactional process the mentee becomes equally (if not chiefly) responsible for his or her own development, actions and beliefs.

Together the research team of Galbraith and Zelenak (1991) asserts that mentoring is a powerful transformative process that allows and encourages individuals to reinterpret their personal, professional, and political environments and to search out alternative ways of thinking and acting. According to Galbraith and Zelenak (1991), mentoring is an appropriate method that incorporates the essential elements of the adult learning transactional process. Galbraith and Zelenak also maintain that a meaningful and rewarding mentoring relationship depends on collaboration, which can be highly emotional.

Another modern researcher whose work is equally important as Galbraith and Zelenak's is Cohen. Cohen's work seeks to establish a mentor competency model for faculty mentors. In Cohen's view, many faculty members were not

prepared for their roles as a mentor, nor did they have any idea what such a commitment would entail when required to mentor college students. To aid faculty mentors, Cohen developed the Principles of Adult Mentoring Scale. The Principles of Adult Mentoring Scale is a tool which assesses the competencies of faculty mentors. The conceptual underpinnings of the Principles of Adult Mentoring Scale are rooted in the works of Galbraith's (1991) transactional process of learning and Kram's (1980) stages of mentoring. This noteworthy tool allowed mentors to self-assess their competency regarding the mentor's role, general behavioral functions, and mentor-initiated actions.

Cohen (1995) asserts that the mentor-mentee relationship, regardless of where it occurs, is a learning activity created for the benefit of the mentee with the mentor functioning as a guiding influence on the mentee's choices and goals. It is important to note that Cohen aims for clarity regarding the mentor as a guiding influence rather than a controlling force or influence. This is evident, as Cohen further maintains that the mentor assumes responsibility for promoting a transactional process of learning by engaging the mentee as a collaborative partner in learning.

Through the essential element of collaboration, mentoring has evolved and transformed from a master-led process into a transactional process of learning and development. Mentees are moreover responsible for their development and are no longer passive participants. This evolution of the mentoring practice allows for more effective utilization in organizations and aids in the continuous utilization of mentoring as a means to develop human capital.

## Mentoring Research Concerns

Literature reviews help to connect past research with current research. Regarding mentoring, two comprehensive works (Crisp & Cruz, 2009; Jacobi, 1991) stand out by making connections in the literature on mentoring and drawing distinctions between the works over an extended period of time. Crisp and Cruz (2009) credit Kram's study on the stages of mentoring within the context of a business relationship as the most comprehensive empirical study to date on mentoring. Kram's work is highly referenced and studied, as it is fundamental to understanding the essential characteristics (or stages) of a mentoring and/or developmental relationship.

In the critical opinion of Crisp and Cruz, a limitation of Kram's study is that it is limited in terms of external validity and possible relevance to students. Crisp and Cruz recognize Kram's work focuses on mentoring relationships in the workplace and not an educational setting. However, to date no researcher has duplicated Kram's extensive study. Carrera (2002) expands upon Kram's work by examining Kram's psychosocial and career mentoring functions impact on a university mentoring program. In spite of the external validity questions (Crisp & Cruz, 2009), Kram's research continues to influence current literature on mentoring relationships.

Even the usage of the term "developmental relationship" was brought into existence by Kram. Kram (1980) discovered that it was necessary to create the term or label "developmental relationship" in order to incorporate elements of the mentor relationship suggested in the work of previous researchers such as

Levinson, et al. (1978). Further, this term emerged during the initial stages of Kram's research, documented in her highly esteemed dissertation titled "Mentoring Processes at Work: Developmental Relationships in Managerial Careers."

Although a highly researched topic since the 1970s, Jacobi's (1991) extensive review of the literature revealed an unsettling finding. Jacobi discovered that the importance of mentoring in undergraduate education was growing; however, no widely accepted operational definition of mentoring existed. Fifteen definitions for mentoring were identified by Jacobi. Six of the 15 definitions were used in the field of higher education; seven were used in management and organizational behavior; and two were used in psychology. Following-up on Jacobi's work, Crisp and Cruz (2009) discovered over 50 definitions, which varied in scope and breadth in their critical review of the literature. Crisp and Cruz agreed that numerous definitions provide evidence to support the perceived ambiguity in the literature regarding mentoring. Further, other researchers such as Wrightsman (1981) also noted the lack of consensus of mentoring definitions and the problems resulting from the lack thereof in the field of psychology.

Another issue of concern listed in Jacobi's (1991) work was the lack of the theoretical and empirical findings supporting the link between mentoring and academic success. Jacobi reiterated that the intention of mentoring programs (at colleges and universities) was to help undergraduate students and that those programmatic efforts were sincere. However, Jacobi also maintains having



numerous definitions of mentoring results in difficulty developing clarity antecedents, outcomes, characteristics, and mediators of mentoring relationships. Jacobi's work is quite insightful and significant, because her literature review covers an extensive period of time (circa 1977 – 1990) in which mentoring was making its way into the mainstream in the areas of academics, business, and psychology.

In 2009, Crisp and Cruz followed-up on Jacobi's work and point out "mentoring research has made little progress in identifying and implementing a consistent definition and conceptualization of mentoring" (p. 526). Crisp and Cruz further state that the research on mentoring is lacking in terms of rigorous, quantitative research designs that allow for testing the external validity of findings.

While all of the previously listed issues represent a barrier for modern researchers in the field of mentoring, the usage of mentoring remains widespread and continues to be utilized as a performance intervention.

#### Mentoring in Higher Education

According to Daloz (1999), the term mentor has been used sporadically in higher education for years. Still, mentoring is not an abstract concept to colleges and universities. In many instances mentoring on college campuses occurs informally; while in other instances, university officials have implemented formal mentoring programs. Colleges and universities have implemented a variety of programs (including mentoring), which are carefully designed to support students and to aid in retention.

Dolaz appears to have a multi-layered understanding of mentoring on college campuses. Dolaz (1999) emphasizes that mentors generally have a wider role than do conventional faculty advisers. Dolaz further states that mentors on college campuses may or may not teach classes, but are inevitably engaged in one-to-one instruction. The result of such close contact with the student/mentee is that the mentor is more concerned about the student's individual learning needs than the regular teacher (Dolaz, 1999).

While congenial, Dolaz (1999) is skeptical of Murray and Owen's (1991) chosen title for their work. Dolaz however credits Murray for having one of the most directly practical guides available on how to establish mentoring programs in institutions. Other models for mentoring program development and support for maintaining existing mentoring programs in organizations (public, private, universities, etc.) include the creation of The Mentoring Group (2009), a division of the Coalition of Counseling Centers, Inc. Ironically, Dr. Linda Phillips-Jones was one of the founders of this organization. Such resources developed by Murray and The Mentoring Group have been used to develop and maintain programs in academia, as well as the private and public sector, to provide practical guidance to mentors and mentees alike.

According to Vincent and Broussard (1998), many secondary educational institutions are implementing mentoring programs to prepare students for future roles in life. Vincent and Broussard also state that mentoring college students was often overlooked due to the fact that they had yet to enter a profession. Yet, Vincent and Broussard promptly inform the reader that this ideology is changing

with the emergence of college-based mentoring programs. In order to stress their point regarding the emergence and widespread implementation of mentoring on college campuses, Vincent and Broussard (1998) create an inventory of numerous mentoring programs implemented to nurture and guide specific target populations of students. These include, but are not limited to, mentoring programs for engineering students at Purdue University; foreign graduate students at the University of Wisconsin; and minority students at the University of Oklahoma and Colorado State University. Finally, Vincent and Broussard attempt to bring the reader up-to-date on the status of the interest and backing that business and industry provide for mentoring programs. Along with the computer science and computer engineering professions, Vincent and Broussard (1998) recognize corporations such as Proctor and Gamble Company and USAA Insurance Company for noble efforts to mentor students.

While some colleges and universities invested financial and human resources into mentoring programs to aid in student retention, others have primarily done so in order to fulfill a requirement stipulated by a federal grant. The research conducted by Morales (2008) on academic resilience is beneficial to both of the previously stated causes for mentoring on college and university campuses.

Morales' (2008) study on academic resilience seeks to investigate the academic resilience of high achieving low socioeconomic male and female college students of color. All study participants were undergraduate students at various colleges and met a resilience criteria established by Morales. The

sample consisted of 50 self-identified African American and Hispanic students (31 females; 19 males) attending predominately White colleges and universities, which met the following resilience criteria (Morales, 2008):

1. Parents had limited educational backgrounds (high school graduates or below) and self-identified as an ethnic minority; and
2. Student completed a minimum of 30 college credits and had a minimum grade point average of 3.0 on a 4.0 scale.

Morales explains that the sample is considered a purposeful sample in that the participants were chosen because they could best help understand a given phenomenon. According to Morales (2008), in this study the phenomenon is the process of academic resilience. Morales further explains that the sample was not intended to be representative of resilient males and females nationwide.

Data for the study were collected through the qualitative research means of interviewing. Due to the qualitative research technique utilized, Morales sought completeness and data-saturation (Morales, 2008). According to Morales, completeness was reached when the researcher was satisfied with the comprehensiveness and accuracy of the findings and data saturation when additional interviews provided little new information. Further, a minimum of three 90-minute interviews were conducted with each participant. The interviews were audio recorded then transcribed.

Regarding mentoring, Morales' study revealed that when identifying influential mentors (during high school and college), having a mentor of the same gender was significantly less important for the females than for the males. The

study further revealed that 71% (22/31) of the female participants identified persons at the college level whom they considered to fulfill a mentoring role for them. Even though more males (74%) identified someone as fulfilling a mentoring role for them in college, they were found more discriminating when it came to the gender of the mentor. Of the mentors identified by the males, only 13% (five) of them were female mentors and 87% (33) were male. The females identified 65% (40) of their mentors as female and 35% (21) were male. Overwhelmingly, the male students preferred male mentors.

Morales' (2008) study remains significant to coordinators and administrators of the McNair Program, as many of them are responsible for pairing the mentors with the McNair Program participants (mentees). Likewise, McNair Program participants may also choose their mentors. The work of Morales is also significant to the current researcher due to the target population of the study, which closely resembles the target population of the McNair Program.

According to the research, one is led to presume that having an awareness of the mentee's preferences has value and could help McNair Program coordinators and administrators in their efforts to encourage the mentees to approach the mentoring relationship with a positive outlook and disposition. According to Morales (2008), same gender mentor preferences are common and consistent with previous research findings. Initial findings of same gender mentor preference compelled Morales to take a closer look at the parental status of the participants. A closer look at the parental status revealed

that of the 50 participants, more than half (approximately 52%) grew up with only their mother. Fifty-one percent (51%) of the females grew up with only their mother and 47% of the males grew up with only their mother (Morales, 2008). Morales perceives that the level of same male parental relationships may have created a longing or need for male role models on the part of the males. Morales further cites the work of Pollack (1998) to support this idea regarding the males in the study.

Also of importance, female participants in the study did excel when paired in inter-gender mentoring relationships. Hence, Morales (2008) contends that based on this study, the quality of the mentoring supersedes the sharing of the same gender. As a result, Morales asserts that additional research on resilience is needed because it will help to inform those who are responsible for the design and implementation of initiatives to promote high academic achievement for statistically at-risk college students. The McNair Program has a similar function, as it targets first-generation college students. Further, Morales' findings would help to fill in the familiarity gap indicated by McNair Program participants in Vincent and Broussard's (1998) study, as these study participants indicated that mentors should have more knowledge about their mentee's backgrounds.

As previously stated, some colleges and universities have executed mentoring programs in order to comply with federal requirements for grants. The McNair program is one such program that operates on college campuses through federal funds awarded to colleges and universities. According to the Code of Federal Regulations (2009) mentoring programs, exposure to cultural events and

academic programs, opportunities for research, summer internships, seminars, tutoring, academic counseling, assistance in securing admission and financial aid for graduate school are approved activities for colleges and universities to facilitate and employ as part of their McNair Program. The McNair Program is one of several federal TRIO programs; however, it is specifically designed to aid and assist students academically and financially in their quest for terminal degrees.

Often, programs such as the McNair Program are located in the Office of Student Support Services (SSS). Krause (2007) maintains that SSS programs seek to provide services designed to give students the academic skills and confidence to succeed in college. Further, SSS programs make available a wide range of services including personal and financial aid counseling, study and time management skills, peer mentoring, and tutoring. Researchers, such as Krause (2007), link the support provided by SSS programs to student retention, and profess that administrators and faculty regard SSS programs as beneficial to the individual and retention rate of the institution.

Krause (2007) further maintains services such as personal and financial aid counseling, study and time management skills, peer mentoring, and tutoring are categorized as structured services according to TRIO guidelines. Thayer (2007) asserts structured services, such as those previously mentioned, increase the student's connectedness to the institution and enhance the quality of learning. Although Thayer's research focuses on the TRIO Upward Bound program and the impact it has on the academic achievement of African American

males, Krause's view on student support services programs aligns with Thayer's view. According to Krause, SSS staff discovered that an advantage exists for students to be part of a support group that provides strong academic concentration. Through personal contacts and mentoring, as stated by Krause, staff help students (i.e. TRIO/McNair program participants) develop a sense of community with academic strategies and simultaneously promotes networking and relationships with faculty. Krause points out that SSS activities provide students the skills needed to succeed in attaining a post secondary degree.

Krause offers key recommendations for TRIO SSS programs. Two of Krause's three recommendations are pertinent to the scope of this research. These two recommendations are a) first generation, adult students require different support systems to succeed in an academic setting; hence, these programs should provide interaction with staff and faculty which meets the social, psychological, and academic needs of the students and b) first generation, low-income, nontraditional students may have conflicting obligations and be underprepared for the academic rigors of college; therefore, specialized workshops, tutoring, and mentoring need to be designed and implemented to enable students to fit academic activities in their schedules.

While Krause's work is insightful and should not be overlooked, Jones-Giles (2004), seeks to make a meaningful connection between students at Historically Black Colleges and Universities and retention. Jones-Giles professes that having a better understanding of why some students (specifically those enrolled in Historically Black Colleges and Universities [HBCUs]) persist and



others do not would help administrators develop more effective strategic plans and policies for improving student retention. According to Jones-Giles (2004), students who are the first to attend college in their family (first generation students—a specific target population/beneficiary of the McNair program) are among the most vulnerable nontraditional students to drop out of college and therefore recommends that institutions (particularly HBCUs) be innovative, creative, and clear in their approach to retaining students. Of the nine academic institutions (colleges and universities) included in the qualitative research conducted by Jones-Giles, approximately 78% (seven) utilized mentoring (faculty and/or peer) as a tool to aid in student retention.

Although the research of Jones-Giles revealed that mentoring is a tool widely used by the academic institutions in the study and that mentoring influences student retention, no insight is given regarding the preparation of the mentors' awareness of their roles. Mentor competencies, preparation, and awareness are not within the scope of Jones-Giles' research, even though Jones-Giles defines the responsibilities of a mentor. Responsibilities include advising, coaching, teaching, and modeling successful behaviors. Jones-Giles further states that the roles of the mentor vary depending on the mentor's abilities and the needs of the student. Jones-Giles' findings regarding mentor roles further align with the work of Murray and Owen (1991).

Cracco's (2007) qualitative research seeks to explore the perceived benefits of faculty mentoring for first-generation TRIO students to aid in retention and increase graduation rates at a Midwestern community college. Three

theoretical frameworks provide the basis for Cracco's research. The first of the three is germane and useful to the author's research on mentor competency for faculty mentors involved in the McNair Program. Cracco utilizes Cohen's (1995) mentoring theory because of the interpersonal communication component. Cracco's views align with Cohen's regarding the critical role the mentor plays in aiding first-generation TRIO students to adapt and transition into college life. Thereby increasing retention rates and ultimately successfully completing college. Cracco expresses the relationship between the mentor and the mentee must be based on trust and honest communication, because the mentee must feel that the mentor will facilitate learning and provide guidance.

#### Faculty Mentor Competencies

Cohen's (1993) mentoring research attempts to bring clarity and insight to the collegiate faculty mentor regarding not only their role, but also to the competencies needed for effective mentoring in a setting of higher education. Prior to Cohen, mentoring research did not directly focus on the "faculty" mentor and did not provide an objective means of assessing plausible competency as a mentor of adult learners (Cohen, 1993). According to Cohen (1993), this was an undeniable problem in the evolution of mentoring programs on college campuses. As a response to this keen observation, Cohen developed and validated the Principles of Adult Mentoring Scale.

The Principles of Adult Mentoring Scale serves as a mentor competency self-assessment tool. Cohen's tool gives insight to the faculty mentor on their individual competency levels based on the phases of the mentoring process, and

provides a validated competency model for faculty mentors to use as a guide. A benefit of the Principles of Adult Mentoring Scale is that it is a self-assessment. Self-assessment allows faculty mentors to complete the assessment in a manner that is uninhibited, honest and without fear of judgment from a third party's observation.

As previously stated, Cohen's competency model focuses on six distinct areas of competency based on the stages of the mentoring process. According to Cohen (1995), these six mentor functions represent the complete mentor role. These six functions serve as the basis for the Principles of Adult Mentoring Scale or competency model developed by Cohen (1993, 1995). Cohen (1995) maintains that as the mentoring relationship progresses the mentor should demonstrate effectiveness in all mentoring behavioral categories. Cohen's six behavioral functions are briefly described below:

Relationship Emphasis – Involves active listening, understanding, and acceptance of the mentees' feelings. The mentors' behaviors (i.e. listening and not judging) promote a climate of trust, which allows the mentees to honestly share and reflect on their experiences.

Information Emphasis – Involves soliciting detailed information and offering specific suggestions regarding current plans and progress in achieving goals (ex. personal, educational, and career). Advice offered is based on accurate and sufficient information.

Facilitative Focus – Involves guiding mentees through an in-depth review of interests, abilities, ideas, and beliefs relevant to academia or the

workplace. Assistance given aids mentees in considering alternative views and options while reaching their own decisions about attainable goals.

**Confrontive Focus** – Involves respectfully challenging mentees' explanations for or avoidance of decisions and actions relevant to their development as adult learners or to their career development in the workplace. Help is given to mentees in order to attain insight into productive strategies and behaviors, which will further help to evaluate their need and capacity to change.

**Mentor Model** – Involves sharing appropriate life experiences and feelings as a role model to mentees. This further personalizes and enriches the mentoring relationship. Motivation is given to mentees to take necessary risks, make decisions, and continue to overcome difficulties.

**Mentee Vision** – Involves stimulating mentees' critical thinking in regard to envisioning their future and developing potential. Encouragement is given to mentees to function as independent adult learners, take initiative to manage change, and to negotiate constructive transitions through personal and workplace events.

In 1995, Cohen expanded the Principles of Adult Mentoring Scale for use in business and government. Although the Principles of Adult Mentoring Scale for Business and Government also consists of 55 questions, this version focuses on functions that would occur in a business or governmental environment between a mentor and mentee that is an employee of the public or private organization and not a student in academia. Researchers such as Hittmeier

(2007) utilized Cohen's model by determining if there was a correlation between psychological type and mentor competency. Cohen's work on mentor competency is consistently cited in the literature on mentor competency, as a validated, comprehensive tool to assess mentor competency.

Previous works (Dolaz, 1986, 1999; Kram, 1980; Levinson et al., 1978) on mentoring list and describe the functions of a mentor; however, Cohen's work targets the competencies needed for effective mentoring. Cohen's work is important to mentoring in academia because it is the first deliberate step to create a comprehensive competency model for the faculty mentor. Cohen's work is also significant to the McNair Program, as many of the mentors involved in the McNair Program are faculty members. Understandably, it is even more imperative to the current researcher because of its potential to enhance the awareness and effectiveness of the McNair Program's mentoring component.

#### Ronald E. McNair Program Mentoring Component

Dr. Ronald E. McNair is a celebrated and highly regarded American astronaut, author, and scientist (NASA, 2003) whose love for science led him from humble beginnings in South Carolina to NASA's space shuttle missions. Dr. McNair is a continual inspiration to many minority youth throughout the United States for his scholarly achievements. In his honor and memory, organizations have named professorships, schools, and parks after him. Perhaps most complementary to his legacy is the federal program named in his honor, which specifically targets first-generation, minority students and other underrepresented groups to achieve academic success. According to the U.S. Department of

Education (2010), the federally funded Ronald E. McNair Program is designed to prepare participants for doctoral studies. Participants in the program are required to participate in research and other scholarly activities. The Code of Federal Regulations (2009) prescribes which activities and services colleges and universities may implement and conduct in order to maintain a McNair Program. According to the Code of Federal Regulations, mentoring programs are an approved activity and service for McNair Programs.

The mentors and mentees in the McNair Program meet and interact on a regular basis. In many instances, the McNair Program participants have the opportunity to select their own mentors without having them pre-assigned by McNair Program coordinators or administrators. Although McNair participants may be allowed to select their mentors, the mentoring associated with the McNair Program is more aligned with formal mentoring rather than informal mentoring. The mentoring involved in the McNair Program is more closely aligned with formal mentoring due to the establishment of goals and objectives, regularly scheduled meetings and interactions between the mentor and mentee, set timeframes established for the mentoring to occur, presence and availability of support for mentors in completing their responsibilities (e.g., printed materials, resources, etc.), and mentoring contracts. Researchers, such as Carrera (2002), stated that formal mentoring programs tend to be more advantageous in terms of academic success and effectiveness and that these mentoring programs are somewhat easier to examine empirically.

Differences and distinguishing characteristics exist between formal and informal mentoring. In formal mentoring there are planned and structured methods for pairing mentors and mentees, required activities, and contracts. Informal mentoring does not contain such elements. According to Murray and Owen (1991), informal mentoring may have a magical element or feel but it lacks the structure of formal mentoring. Murray and Owen (1991) further state that proponents of informal mentoring suggest that true mentoring is spontaneous and caution that it cannot be structured. Such individuals pledging allegiance to this school of thought further maintain that structured mentoring lacks a critical, magical ingredient present in informal mentoring (Murray & Owen, 1991).

While many researchers study mentoring, few have chosen to study mentoring as it relates to the Ronald E. McNair Program. Carrera is one such researcher who attempted to study the mentoring component of the McNair Program in order to advance the knowledge of mentoring and its effectiveness in the McNair Program. Carrera (2002) hypothesized that Kram's mentoring functions positively contribute to the effectiveness of the McNair mentoring component. The measures of effectiveness were based on the goals and objectives of the McNair Program. The measures included in the study were a) intention to attain a doctoral degree; b) awareness of the graduate school experience; c) knowledge of research; and d) knowledge of professional organizations and conferences. Further, an exploratory analysis was conducted by Carrera to examine gender and ethnic differences, and cross-sex ethnicity versus same-sex ethnicity differences in mentoring effectiveness and functions.

The results of Carrera's (2002) extensive research yielded eight areas of significant findings regarding the mentoring component of the McNair Program. Carrera's findings particularly of interest to this research are that psychosocial and career mentoring functions were associated with increased mentoring effectiveness in terms of knowledge of graduate school, research, and professional organizations and conferences; no gender differences were found in perceptions of mentoring functions; and no gender differences were found in the level of mentoring effectiveness. It is also important to note that Carrera's research question which asked how protégés rated the level of effectiveness of the mentoring program is expanded upon in the current research, as the current researcher seeks to incorporate the mentors' competency level as determined by Cohen's (1995) Principles of Adult Mentoring Scale into the examination of the mentee's perspective of the effectiveness of the McNair Program's mentoring component.

In order to gain more in-depth information regarding the interworking of the McNair Program, Vincent and Broussard also embarked upon a national study of the McNair Program. This national study focused on various aspects of the McNair Program. At the center of the study was the mentoring component of the McNair Program. The outcome of Vincent and Broussard's (1998) national study was a thorough description of the participants, utilization, and application of the McNair program.

Vincent and Broussard label their study as being descriptive, as they primarily utilized descriptive statistics to analyze their data. The methodology



included administering a 21-question survey to 257 McNair Program participants. The study gave insight into McNair Program participant demographics. Findings of the study revealed that in 1998 students in the program were primarily seniors (60.7%). While 23.3% were juniors, 6% were college freshman and sophomores, and the remaining 10% were graduate students (Vincent & Broussard, 1998). Other key demographics included in the study included the majors of the protégés and their gender, race, and age. According to this study, majority of the McNair Program participants were science majors (24.5%). Other majors listed by respondents included psychology, social work, education, business, social studies, math, engineering, and English.

Majority of the McNair Program participants were female (63%). The remaining 37% were male. Regarding race, 41% of the participants were African American. Other races participating in the program included Caucasians (31%), Hispanics (15%), Asians (6%), and other (7%) (Vincent & Broussard, 1998). The last element listed as a participant characteristic by Vincent and Broussard was age. Approximately 72% of the participants were 18-26 years old. The remaining 28% of the participants' ages range from 27-56 (Vincent & Broussard, 1996).

The work of Vincent and Broussard is significant to the appraisal of the McNair Program's mentoring component and the current research because it gives McNair Program administrators, coordinators, mentors, and mentees insight into the perspectives of the participants (mentors and mentees) and the efficiency and effectiveness of the program. Although at a glance Vincent and

Broussard's national study seems somewhat ambitious and their reporting marginal, valuable data and descriptions do emerge from their work.

Two points made by Vincent and Broussard that would unlikely be heavily debated is their definition of what mentoring is and their stance on the function of the mentor. Vincent and Broussard (1998) conclude that mentoring is the process of people (mentors) helping others (protégés) increase their chances of success by advising, guiding, and encouraging them. Vincent and Broussard further assert that mentors function as teachers and coaches to create learning opportunities. Accordingly, these researchers also profess that the mentor also challenges the protégé to develop to their full potential.

Just as individuals matriculate in college for a variety of reasons, McNair Program participants enter the program for a variety of reasons. These varying reasons and dispositions were revealed in Vincent and Broussard's (1998) study. Thirty percent (30.4%) of the McNair participants stated that their motivation for entering the program was for personal/professional fulfillment. Other top motivators for entering the McNair Program were self interest (29.6%) and an interest in research (20.6%). Finally, additional reasons reported by McNair program respondents, which accounted for their participation and involvement in the program were teacher request, goal orientation, compensation, and coercion.

As previously stated, the focus of Vincent and Broussard's national study is the mentoring component of the McNair Program. Study results provide insight on mentor and mentee pairings, responsibilities of the McNair mentor and the mentee, preparation of the mentor and mentee, and program enhancements.

McNair participants are typically paired with a university faculty member through the course of the program. How these dyads are united and/or assigned differs from program to program. Participants in Vincent and Broussard's (1998) study reported (42%) that most often they (McNair participants/mentees) choose their faculty mentors. McNair Program administrators assigned mentors to participants 17.1% of the time. Respondents also indicated that 37.4% of them were assigned through a mutual agreement. Only 3.5% of the mentors actually chose or selected their own mentees. The Code of Federal Regulations (2009) do not provide any guidance or place any rules into effect regarding how McNair participants are paired with a mentor. While some may view a lack of guidance or standards on this matter from the Code of Federal Regulations as an opportunity to be creative and flexible in implementing the mentoring component, it is possible that this lack of guidance may perpetuate inconsistency and make it difficult to measure the effectiveness of all aspects of the McNair Program's mentoring component.

On the other hand, the Code of Federal Regulations lists approved activities and service colleges and universities may conduct to support the McNair Program participants during their tenure in the McNair Program. The approved activities and services serve as opportunities for research, summer internships, seminars, tutoring, academic counseling, assistance in securing admission to and financial aid for graduate school, *mentoring programs*, and exposure to cultural events and academic programs (Code of Federal Regulations, 2009).

As articulated by Vincent and Broussard (1998) the responsibilities of a McNair mentor are as follows:

1. Hold initial discussions with the student to define the research project. This further entails picking benchmarks that signal progress and developing a timeline for completion;
2. Hold supportive discussions during the project to help resolve problems and come to conclusions;
3. Review and critique the final report on the research project; and
4. Schedule the defense of the research.

Correspondingly, Vincent and Broussard (1998) discuss the responsibilities of the protégé. As stated by Vincent and Broussard, the responsibilities of the protégé are as follows:

1. Attend all scheduled McNair Program meetings.
2. Represent the McNair Program both on and off campus by projecting a positive image.
3. Sign a research agreement stating all the requirements of the contract.

Vincent and Broussard also maintain that as a McNair participant, a student may not have any outside work commitments that would conflict with the 35-40 hour a week research commitment.

Vincent and Broussard appear to recognize the value and importance of the mentoring component of the McNair Program, as they also include an evaluation of the mentoring experience in their study. Mentees or McNair

participants were asked about the training or preparation they received to participate in the McNair Program and what could be done to prepare them, as well as their mentors, to participate in the program. According to Vincent and Broussard's (1998) study, majority of the McNair participants received training primarily from materials and meetings. Materials used to orient McNair participants or mentees were handouts and articles. Study respondents also indicated that McNair administrators held frequent meetings and workshops to provide training.

McNair Program participants in Vincent and Broussard's study further indicated that they could better prepare for participation in the McNair program by receiving more information on research techniques, having frequent meetings with their mentor, and participating in more training related to their role as a mentee/protégé. Study respondents also indicated that mentors should be aware that the time available for meetings is important and necessary. In addition, the survey respondents indicated that mentors should have more knowledge about the McNair Program, receive prior training and orientation to their roles as mentor, and have more knowledge about their mentee's background.

While it is a program based on good intentions and has great purpose, Vincent and Broussard (1998) reveal the suggestions for improvement of the McNair Program based on the results of their study. The majority (56.4 %) of the survey respondents indicated that there was room for improvement in the McNair Program, particularly regarding research. The mentees indicated that more time

should be allowed for conducting research. Other areas, which were cited as needing improvement, included training on the roles of the mentor and protégé, incorporating prerequisite research and writing courses, and mentor and mentee selection.

To align with the results of the study, Vincent and Broussard prescribe seminars, workshops, handouts, and other resources for the McNair participants. Such resources and tools are recommended in order to help meet the needs of the McNair Program study participants in the areas which they felt more improvement was needed. Additionally, Vincent and Broussard strongly encourage McNair Program mentors to recognize that they are committing themselves to helping inexperienced researchers. Ironically though, Vincent and Broussard behest program administrators to encourage more frequent meetings between mentors and mentees when completing projects; prepare McNair participants or mentees for their roles; and make the research project a fulfilling experience. Vincent and Broussard further encourage the program administrators to realize that protégés need better time management skills, additional time is needed to conduct research, and that the mentoring process propagates itself. According to Vincent and Broussard's findings, there is room for improvement regarding the mentoring component of the McNair Program.

As previously stated, the McNair Program aims to increase the number of minority individuals with terminal degrees. Approximately 95% of the respondents in Vincent and Broussard's study indicated plans to attend graduate school signaling that McNair participants have an awareness of graduate

programs and consider graduate school to be the next step along their educational path. Yet, 71.1% of the mentees in Vincent and Broussard's study indicated that they were planning to enter graduate school before entering the McNair Program. Finally, a small percentage (2.4%) of study participants indicated that they did not plan to attend graduate school and even less (2%) were simply undecided.

#### Literature Review Summary

In today's society mentoring is considered a viable practice that is not only used in the private and public sector, but in academia as well. Mentoring's rich history, which is traced back to Homer's *Odyssey*, has perpetuated it to become a magical phenomenon that is hard to describe in one single word by intellectuals. Although difficult to summarize in a single word and often challenging to empirically measure and evaluate, many intellectuals and researchers do not deny its value and good intentions. Therefore, mentoring continues to be utilized as a tool to aid in the growth and development of human capital.

Through the practice of mentoring, many individuals have attributed their individual success. Accordingly, Dr. Ronald E. McNair stands as a mentor for many first-generation and socioeconomically disadvantaged students in the United States. A federally funded program named in his honor seeks to provide opportunities for such students to attain terminal degrees in their chosen field. Recognizing the value of mentoring, the federal government has listed mentoring as an approved activity to support students in the McNair Program. By

maintaining an effective mentoring component with aware and competent mentors, institutions of higher learning with McNair Programs can help ensure that the goals and mission of the McNair Program are successfully achieved.



## CHAPTER III

### RESEARCH DESIGN AND METHODOLOGY

#### Introduction

Mentor competency possibly impacts the success of the mentoring relationship in ways that are seen and unseen. Arguably, a mentor's competency is at the foundation or core of whether a formal mentoring relationship is considered effective and successful. The author's interest is heightened by this phenomenon and explores the impact of the mentee's perception of the mentor's competency on the success of their mentoring relationship.

Following is the research methodology, which outlines the research design, hypotheses, population, instrumentation, data collection, and data analysis for the study.

#### Research Design

A key element which classifies quantitative research as experimental is subject random assignment to a treatment or control group (Russ-Eft & Hoover, 2005). This study does not involve the random assignment of subjects to a treatment or control group. Therefore, this study is nonexperimental.

Johnson (2001) maintains it is helpful to classify nonexperimental research according to the time dimension and that research is categorized as cross-sectional, longitudinal, or retrospective. This study is cross-sectional, as the data are collected from research participants at a single point in time or during a relatively brief time period (Johnson, 2001).

Nonexperimental research is typically classified into one of three categories, which include descriptive, predictive, and explanatory research (Johnson, 2001). Johnson maintains research which has the intent to predict an event or phenomenon in the future is classified as predictive research. As stated in the study's hypotheses, a prediction is made regarding McNair Program faculty mentor competency and the impact of such competency on McNair student intent to attain a doctoral degree and awareness of graduate school. Accordingly, this research is categorized as predictive.

Creswell (2003) maintains that quantitative research methods are characterized by a predetermination; instrument based questions; performance data, attitude data, observational data, and census data; and statistical analysis. This study utilizes a web survey, accessible through SurveyMonkey, to gather all data. The applied strategy of inquiry, surveying, is associated with the quantitative approach (Creswell, 2003). The instrument is an adaption of surveys previously used by Cohen (1995, 1995) and Carrera (2002). Cohen's questionnaire was created to assess the competency of faculty mentors and Carrera's survey was created to assess the McNair Program's mentoring component. Both works are of significant value to the current work, due to the limited availability of tools created to measure faculty mentor competency and the goals of the McNair mentoring component.

Based on Creswell's (2003) characterization of quantitative research methods, the research outlined as follows is a quantitative research approach. This study gathered quantitative information on the perceived faculty mentor

competency in three distinct areas (relationship emphasis, information emphasis, and student vision), student (McNair Program participants) intent to attain a doctoral degree, and student awareness of graduate school.

This study examines the relationship between McNair Program participant perception of faculty mentor competencies (Cohen, 1993, 1995) and McNair student perceived success based on the goals of the McNair Program as defined by Carrera (2002). More specifically, the study determines if faculty mentor relationship emphasis competency, information emphasis competency, and student vision competency scores significantly predict McNair Program student intent to attain a doctoral degree and awareness of graduate school.

#### Research Hypotheses

The following hypotheses will be investigated:

- Hypothesis 1: Faculty mentor relationship emphasis competency, information emphasis competency, and student vision competency scores can significantly predict the McNair Program student intent to attain a doctoral degree, controlling for GPA and parental education levels; and
- Hypothesis 2: Faculty mentor relationship emphasis competency, information emphasis competency, and student vision competency scores can significantly predict the McNair Program student awareness of graduate school, controlling for GPA and parental education levels.

## Population

The population for this study is comprised of Ronald E. McNair Program participants at the University of Alabama/Tuscaloosa, University of Montevallo, University of Louisiana/Lafayette, Jackson State University, University of Mississippi (Ole Miss), and The University of Southern Mississippi. The study population is enrolled undergraduate or graduate students currently working or previously worked with a faculty mentor as a participant in the McNair Program. The total number of students in the population is 164 federally funded, authorized McNair Program participants.

Based on the small number of McNair Program participants, the entire population was surveyed for the target institutions (N = 164). This decision by the researcher is logical, and guided by the works of Gay (1981) and Dillman, Smyth, and Christian (2009). Tailored Design Method (Dillman et al., 2009) strategies, which are discussed at length in the Procedures section of this chapter, were utilized to engage the targeted population. This decision, along with surveying the entire population, aided the researcher's effort to conduct quality research by generating sufficient response to the survey.

The researcher maintains that no human subjects involved in this research were at risk of any harm or danger as a result of participating in this study. Accordingly, the research methods were reviewed and approved by The University of Southern Mississippi's Institutional Review Board (IRB) prior to collecting data in support of this research.

### Instrumentation

A web survey was utilized to collect data from the target population. SurveyMonkey, an online survey tool, was the medium through which the survey was administered via the Internet. The researcher's decision to administer a web survey for the targeted population (university students) is supported by the work of Dillman et al. (2009). According to Dillman et al. (2009), use of the Internet as a survey mode has been largely limited to surveying specific populations of interest with high Internet access rates and skill levels. Specific populations identified by Dillman et al. (2009) surveyed through the Internet include university students, members of professional associations, employees of certain organizations, purchasers of certain products and services, and similar populations. Dillman et al. further maintain that Internet surveys for these populations can be reported faster and often at lower costs than traditional survey modes.

Surveys from two previous studies (Carrera, 2002; Cohen, 1993, 1995) on mentoring were adapted for the purpose of this study. In this research, Cohen's *Principles of Adult Mentoring Scale-Postsecondary Education* survey is used to measure faculty mentor competency in three areas, and Carrera's Faculty Mentoring Survey is used to measure goals of the McNair Program mentoring component. Cohen established and reports validity and reliability information for the *Principles of Adult Mentoring Scale-Postsecondary Education* survey. Carrera reports reliability information as well for the Faculty Mentoring Survey.

Validity and reliability for both original instruments are discussed in detail in the following sections.

*Cohen's Principles of Adult Mentoring Scale-Postsecondary Education*

Cohen, a premier and leading researcher in the field of mentoring, created the Principles of Adult Mentoring Scale-Postsecondary Education (Cohen, 1993, 1995) in response to the absence of a tool to assess the competency of faculty mentors. Cohen's tool allows faculty mentors to self-assess mentoring competency in six areas. Further, Cohen's tool remains the only of its kind, and was expanded to address the competency of mentors in business and government. In a similar manner, Cohen's tool was adapted by Burns (2005) to assess the effectiveness of mentoring programs for first-time school superintendents.

The Principles of Adult Mentoring Scale-Postsecondary Education (Cohen, 1993, 1995) is a valid and reliable tool. This determination was concluded based on extensive validity and reliability testing. Dolaz and Schlossberg, two nationally prominent scholars in the field of mentoring and adult counseling, completed the construct validity testing on the Principles of Adult Mentoring Scale-Postsecondary Education (Cohen, 1993). Dolaz and Schlossberg utilized a "back translation" test to ensure the mentor functions could be matched with the item statements of specific mentor behavioral actions specified by the scale (Cohen, 1993). Construct validity testing is essential to an instrument of this kind, because the instrument distinguishes between people who do and do not have certain characteristics (Fink, 2003). Critiques issued by

the scholars revealed the scale met the general requirement for construct validity and concluded that the instrument measured the intended behaviors.

Additional validity testing was conducted by successive juries. The first evaluation jury consisted of 10 nationally recognized scholars who published books and articles on adult mentoring relationships (Cohen, 1993). These scholars served as a national evaluation jury, agreeing to review the tool for content validity. The review of the scholars included a review of definitions and an evaluation of the instrument. A second evaluation jury was commenced to evaluate the tool for content validity. The second evaluation jury or local jury consisted of mentor program administrators, college counselors, administrators of student and academic support service programs, and faculty mentors at the Community College of Philadelphia (Cohen, 1993).

The national and local jury evaluators conducted a thorough evaluation of the instrument. As a result of their review and critical feedback, scale items were worded to reflect detailed and precise psychologically realistic and developmentally important item statements of mentor behaviors (Cohen, 1993).

Cohen's Principles of Adult Mentoring Scale-Postsecondary Education instrument was tested for reliability, using SPSS-PC+ program to perform the reliability analysis (Cohen, 1993). The reliability coefficient for the Principles of Adult Mentoring Scale-Postsecondary Education as measured by Cronbach's Alpha is .95 (Cohen, 1993). Reliability coefficients assume a value of 0.00 to +1.00 (Huck, 2004). A coefficient alpha of .95 suggests high internal consistency. Cohen's Principles of Adult Mentoring Scale-Postsecondary

Education is deemed by the current researcher the most appropriate tool to measure the perception of the faculty mentor's competency in this study.

Extensive validity and reliability testing, the strength of the instrument, and the fact that the Principles of Adult Mentoring Scale-Postsecondary Education is the only instrument designed to assess faculty mentor competency, were factors considered in the researcher's decision to utilize Cohen's tool.

### *Carrera's Faculty Mentoring Survey*

In comparison to other societal phenomena, minimal research exists on the McNair Program. In spite of this, the limited McNair Program research is beneficial to stakeholders in higher education and workforce development professionals. McNair Program research is beneficial because it provides measures of effectiveness for the mentoring component and gives insight into the McNair student level of satisfaction with the mentoring component. Carrera is a distinguished researcher among those who have researched the McNair Program whose research is the only work to exclusively focus on the McNair Program's mentoring component and goals.

Carrera's survey provides demographic and descriptive questions to describe the composition of the mentoring partnership. Two items or measures from Carrera's (2002) work most important to this study's hypotheses are "intent to attain a doctoral degree" and "students' awareness of graduate school." Carrera (2002) reports internal consistency at a level of .96 for the measure of awareness of graduate school. This measure was used by one university to determine McNair Program training needs (Carrera, 2002). Carrera's measure,



“intent to attain a doctoral degree,” is based on one survey question. Carrera does not report internal consistency for this single item. Validity testing results are not provided by Carrera (2002) for the instrument. The current researcher will conduct validity testing for the adapted instrument.

As the only instrument to focus on the McNair Program’s mentoring component and incorporate the goals of the McNair Program, Carrera’s survey items align with the scope of this study. Carrera’s instrument is considered by the current researcher as the most appropriate for the scope of this research.

#### *Adapted Instrument Validity and Reliability*

The adapted survey was reviewed for face validity by Dr. Shirley White, a published author and expert in the field of workforce development and career coaching. Based on Dr. White’s review, some questions were revised in order to read more clearly by including additional examples of tasks which may be more familiar to the subjects.

Shaddish, Cook, and Campbell (2002) list numerous threats to internal validity which are considered as the reason why inferences imply a causal relationship between two variables may actually be incorrect. Among these types of internal validity threats is “selection.” When encountering a selection threat to internal validity, systematic differences over conditions in respondent characteristics may cause the observed effect rather than the variable tested. In the current study, GPA and parental educational level are among such respondent characteristics which could have an impact on the outcome of McNair student intent to attain a doctoral degree and awareness of graduate school.

The mentor's competency and its impact on the McNair student intent to attain a doctoral degree and awareness of graduate school may not have the same impact on students not participating in the McNair Program. This poses a potential threat to external validity. This external validity threat is categorized as "interaction of the causal relationship with units" (Shaddish et al., 2002, p. 87).

Reliability was previously established for Cohen's Principles of Adult Mentoring Scale-Postsecondary Education, which is used to measure faculty mentor competency. The reliability coefficient for Cohen's instrument is .95 (Cohen, 1993), which is considered highly reliable.

#### Data Collection

The adapted survey includes 34 questions and measures faculty mentor relationship emphasis competency, information emphasis competency, and student vision competency. The survey is included in Appendix E. Survey questions required responses to a five-point Likert scale. Response options for these questions (4–34 in the McNair Program section) are *Never*, *Infrequently*, *Sometimes*, *Frequently*, and *Always*. Data items are categorized as ordinal due to the responses fitting on a continuum or scale that is ordered (Fink, 2003). Responses for each of the three competencies were summed and a composite variable was computed for each competency area.

The subjects' "intent to obtain a doctoral degree" was assessed in question number 4. Response options were based on a five-point Likert scale. Respondents' answer choices for question 4 (Educational Goals section) are *Definitely Not*, *Not Likely*, *Maybe*, *Probably Yes*, and *Definitely Yes*.

The subjects' "awareness of graduate school" was assessed in question 1 (Graduate School section). Response options are presented on a five-point Likert scale ranging from *Not at all Beneficial* to *Extremely Beneficial*. The responses were summed and a composite variable was computed.

In addition, data was collected on the subjects' (McNair Program participants) knowledge of professional organizations and conferences (three questions in the Professional Organizations section) and knowledge of research (question 3 in the McNair Program section). Respondents may select "Yes" and "No" in response to questions regarding their knowledge of professional organizations. Question 3 (assesses knowledge of research) allows the respondent to select as many activities as apply (e.g., research project, publishing, etc.), in which they have participated with their mentor to gain knowledge of research. These data are categorized as categorical or nominal data because they have no numerical or preferential values (Fink, 2003).

Demographic data (questions 1-6 in the Demographic Information section) such as gender, age, ethnic origin, parents' educational level, classification, and GPA was obtained from the subjects. Subjects are further asked about educational goals (questions 1-4 in the Educational Goals section); length of participation in McNair program (question 1 in the McNair Program section); and satisfaction with mentoring experience (question 35 in the McNair Program section). Subjects were also asked to provide any additional comments regarding their mentoring experience. Such data are solicited in order to aid the

researcher in providing thorough descriptions of the McNair Program mentoring component.

#### Procedures

The McNair Program Directors or staff at the participating universities acted as liaisons for communications to the subjects in order to protect the subject identity and avoid privacy violations or standards set forth by the participating universities and the McNair Program. Prior to each communication sent to the subjects, an e-mail was sent to the university McNair Program contact. This communication serves as notification of an upcoming e-mail and their role to forward the e-mail to the subjects.

Usage of the Internet to conduct survey research requires specific attention to detail in order to generate ample responses. Dillman et al. (2009) provide recommendations or guidelines to this effect. Sending multiple contacts with a varying message to the respondent increases the response rate. The researcher utilized this strategy to increase the response rate.

The first and initial contact introduced the subjects to the research, its purpose, and solicited participation. The initial contact gave notice for the date subjects should expect to receive the survey. The second contact contained the actual survey. The survey link was embedded within the e-mail communication to allow the respondent immediate access to the survey. The third contact served as a reminder, encouraging the respondents to complete the survey if they have not already done so and thanking them in the event the survey was completed. The survey link was also embedded in the third contact. Dillman et

al. (2009) concede that little research exists on the optimal combination of contacts to use for an Internet survey. In spite of this concession, multiple (3) e-mail contacts were sent to generate interest and participation.

As prescribed by Dillman et al. (2009), the content of each e-mail varied to further aid in the reduction of the likelihood that all messages would be sorted out by spam filters. A phone call to the liaisons followed e-mail contacts to ensure that the communication was successfully transmitted. If determined that the communication was not successfully received by the liaison, the e-mail would have been re-sent. It is important to note that subjects received contacts from their individual McNair Program Directors, not the researcher.

Goritz (2006) contends that a traditional way of motivating people to take a survey is to offer an incentive. Offering a material incentive increases response and decreases dropout rate. Generally, recommendations include using material incentives in web surveys (Goritz, 2006). Traditionally, incentives have increased survey response rates for surveys conducted offline (i.e. mail, face-to-face) (Goritz, 2006). However, online data collection presents additional challenges for offering survey incentives.

Dillman et al. (2009) affirms the difficulty of providing incentives for a pure Internet survey that uses e-mail contacts. As a result, the practice of incentives in web-based surveying in recent years has become a new topic of interest and research. Based on a meta-analysis conducted by Goritz (2006), the usage of incentives in web-based surveys increased the response rate by an average of 4.2 percentage points (Dillman et al., 2009).

Due to the small population, the usage of a material incentive was employed in this study as a strategy to increase responses. Each contact informed the subjects that upon completion of the survey they would have an opportunity to receive a gift card if they were one of the first 50 respondents. Gift cards were \$5 and redeemable at McDonald's, Pizza Hut, or Starbucks.

Gift cards were mailed to the university McNair Program office or e-mailed to the address provided by the survey respondent. The first 50 completers received a confirmation e-mail (see Appendix F) informing them of the gift card, and to pick up their gift card from their university McNair Program office. Survey respondents were given directions at the end of the survey as to how they could receive a gift card. Directions were stated as follows:

Thanks for completing the survey! If you are one of the first 50 survey completers, you are eligible to receive a gift card/certificate. To receive your gift, you must send your e-mail address and university name to [dwuena.wyre@eagles.usm.edu](mailto:dwuena.wyre@eagles.usm.edu) with the wording "McNair First 50" in the subject line. (see Appendix E.)

Dillman et al. (2009) encourages surveyors to monitor the progress and evaluate early completion rates. SurveyMonkey allows researchers the opportunity to monitor the progress of the surveys when completed. The researcher monitored survey completions as recommended by Dillman et al. (2009). The survey remained open for four weeks. At the conclusion of the survey period, survey responses were downloaded and transferred into SPSS 16.0 for analysis.

In summary, this study incorporates Dillman's et al. (2009) guidelines for Internet surveying. The McNair Program Directors (liaisons) forwarded the e-mail communications to the subjects in order to avoid violating university and McNair Program policies. Subjects from the University of Alabama/Tuscaloosa, University of Montevallo, University of Louisiana/Lafayette, Jackson State University, University of Mississippi (Ole Miss), and The University of Southern Mississippi received multiple e-mail communications with varying messages. The survey link was embedded within the final two e-mail contacts. This strategy decreases the likelihood e-mails will be blocked or sent to the subjects' junk mail. Survey respondents had an opportunity to receive a gift card if they were among the first 50 respondents. This strategy helps increase survey responses (Goritz, 2006). The survey instrument and all procedures planned and implemented took into account the privacy and technological capacity of the subjects and Dillman's et al. (2009) guidelines for Internet surveys. These carefully designed methods were incorporated with the intention of maximizing the survey response rate to facilitate meaningful McNair Program and mentoring research.

#### Data Analysis

The procedures outlined in the previous section provided data to analyze the study's two hypotheses. Data collected was analyzed in SPSS 16.0. Sequential multiple regression was employed to analyze Hypotheses 1 and 2 of this nonexperimental cross-sectional, predictive study. A significance level of .05 was used for the test. Additional analysis details, along with study findings, are presented in Chapter IV.

## Summary

According to the U.S. Department of Education (2010), the goal of the McNair Program is to increase the number of doctoral degrees earned by students from underrepresented sectors of society. The purpose of this research is to examine the relationship between faculty mentor competency and the McNair Program mentoring component goals. Research methods planned for this study were driven by the two hypotheses. McNair student privacy and anonymity were considered in planning the research methods for this study. The researcher maintains that the research methods for this study did not violate the subjects' privacy nor adversely impact their status in the McNair Program.



## CHAPTER IV

### RESULTS

#### Introduction

This study examines McNair Program faculty mentor competency and whether such competency has an effect on McNair student intent to earn a doctoral degree and awareness of graduate school. To accomplish the study's purpose, a web survey was administered through SurveyMonkey. Further, data were analyzed using Statistical Package for the Social Sciences (SPSS) 16.0 software. Sequential multiple regression was utilized to conduct analysis for Hypotheses 1 and 2. The employed method of analysis, sequential multiple regression, allowed the researcher to control for variables GPA level and parental education level.

Study results are presented in this chapter. Included in the study results is a descriptive analysis of McNair respondent characteristics, educational goals, knowledge of professional organizations, and activities engaged during the mentoring partnership. McNair student satisfaction with the McNair Program mentoring experience is presented, along with faculty mentor relationship emphasis, information emphasis, and student vision competency levels. A summary of open-ended comments describing McNair student perception of faculty mentors is also presented.

Accordingly, the results of the statistical significance of the study's model in predicting McNair Program student intent to attain a doctoral degree and awareness of graduate school are reported in this chapter.

## Descriptive Statistics

McNair Program participants totaling 164 students from six southern colleges and universities served as the population for this study. Of the 164 subjects in the population, 77 participated in the study yielding a response rate of 46.9%. Out of the 77 respondents, 20 (26%) were male and 57 (74%) were female. The mean age of the participants was 24 and the standard deviation was 8. The median age was 21. Respondent ages ranged from 19 to 69. Two out of three (67.5%,  $n = 52$ ) of the 77 respondents reported their ethnicity as African American/Black, with other ethnicities identified as Caucasian/White, 23.4% ( $n = 18$ ), Hispanic/Latino, 5.2% ( $n = 4$ ), Asian American/Pacific Islander 2.6% ( $n = 2$ ), and Native American/American Indian, 1.3% ( $n = 1$ ).

More students were identified as seniors (63.6%,  $n = 49$ ) than any other classification, followed by juniors, 26% ( $n = 20$ ), 7.8% ( $n = 6$ ), and 2.6% ( $n = 2$ ) graduate students and sophomores, respectively. A plurality (45.5%,  $n = 35$ ) of respondent undergraduate GPA levels were within the range of 3.5 - 4.0.

Respondents were asked to report the level of education attained by their parents. One out of three (33.8%,  $n = 26$ ) reported at least one parent graduated from college or had a graduate degree. Another third (33.8%,  $n = 26$ ) have at least one parent who graduated from high school. Seventeen (22.1%) reported at least one parent had some college, leaving a remaining 10.4% ( $n = 8$ ) reporting that no parent completed high school. Although primarily a program for first-generation college students, study results indicate that McNair Programs also serve students whose parents may have either graduated from college and in some instances possess graduate degrees.

When students were asked how long they participated in the McNair Program, tenure in the McNair Program ranged from 1-5 months to 21-25 months. Majority (52.9%,  $n = 37$ ) of the responding McNair Program students participated in the program ten months or less. Slightly more than one-third (34.3%,  $n = 24$ ) reported tenure in the program as 11-20 months, leaving only nine (12.9%) in the McNair Program at least 21 months.

### *Educational Goals*

Study participants were asked a series of questions regarding their educational goals. When specifically asked about plans to attend graduate school, 70 (90.9%) students responded “definitely yes.” Only one (1.3%) student said they were “not likely” to attend graduate school. Three (3.9%) students currently attend graduate school. Although uncertain of their plans for graduate school, the final 3.9% ( $n = 3$ ) stated “maybe” they would attend graduate school.

Table 3

### *Intent to Attain Doctoral Degree*

		Frequency	Valid Percent	Cumulative Percent
Valid	1	1	1.3	1.3
	2	4	5.2	6.5
	3	8	10.4	16.9
	4	27	35.1	51.9
	5	37	48.1	100.0
Total		77	100.0	

*Note.* 1 = Definitely Not; 2 = Not Likely; 3 = Maybe; 4 = Probably Yes; 5 = Definitely Yes.

McNair students reported their intent to earn a doctoral degree using a Likert scale indicating *Definitely Not* (1), *Not Likely*, *Maybe*, *Probably Yes*, or *Definitely Yes* (5). Nearly half (48.1%, n = 37) of the McNair students reported that they definitely intend to attain a doctoral degree. Table 3 provides additional information on McNair student intent to earn a doctoral degree.

Accordingly, awareness of graduate school was assessed. Students consider the McNair Program faculty mentoring experience somewhat beneficial in increasing knowledge of graduate school. Students rated the benefit as 3.85 on a 5-point scale, where 1 indicates *not at all beneficial* and 5 *extremely beneficial*.

#### *Knowledge of Professional Organizations*

Study participants were questioned about their awareness of professional organizations in their field of study. Four out of five (80.5%, n = 62) participants reported awareness of professional organizations in their respective field of study, while 15 (19.5%) participants indicated they were not aware of such professional organizations. Of those affirming awareness, 29 (46.8%) indicated that they are members of professional organizations in their field. Additionally, 30 (39%) participants reported attending professional conferences in their particular field of study.

#### *McNair Program Mentoring Component*

While mentoring partnerships are optional for McNair Programs, each university participating in the current study utilizes the mentoring component. Subjects revealed they were paired with mentors for a period of time ranging

from 1-5 months to 21-25 months. Fifty percent ( $n = 35$ ) of students reported a mentoring relationship of 1-5 months, making this the most reported timeframe for the mentoring partnership. Conversely, the least reported (8.6%,  $n = 6$ ) period of the pairing was 16-20 months.

On the subject of satisfaction with the faculty mentoring experience through the McNair Program, respondents were asked to report satisfaction on a Likert scale indicating *extremely satisfied*, *somewhat satisfied*, *neutral*, *somewhat dissatisfied*, and *extremely dissatisfied*. A majority (78.6%,  $n = 55$ ) of McNair students were extremely satisfied with the faculty mentoring experience, while nine (12.9%) indicated being somewhat satisfied. Three (4.3%) students were neutral about the faculty mentoring experience and three (4.3%) were somewhat dissatisfied. No participants reported extreme dissatisfaction with the McNair Program faculty mentoring experience.

McNair students were presented with a list of activities and asked to check as many activities as applied in which they engaged with their mentors. In response, students reported engagement in a variety of activities with faculty mentors. Such activities included working on research projects, graduate school research, professional networking, discussion of writing/publishing, job shadowing, research skill building, career development, and assisting mentors in the classroom.

McNair students assessed perceived faculty mentor competency on a Likert scale indicating *always*, *frequently*, *sometimes*, *infrequently*, and *never*. The behavioral based questions (4-34 in the McNair Program section) were

adapted from Cohen's (1993, 1995) faculty mentor competency model. McNair Program faculty mentor competency was explored in three of Cohen's six areas of faculty mentor competency. Competency areas assessed include relationship emphasis competency, information emphasis competency, and student vision competency (see Appendix G).

Competency level scoring and interpretations are based on Cohen's (1995) scoring sheet for faculty mentors in postsecondary education. Individual faculty mentor relationship emphasis competency scores ranged from 10 to 50. Such scores categorize individual McNair faculty mentor competency level as "not effective" (score of 10 to 35) to "highly effective" (score of 45 to 50). Collectively, the faculty mentor relationship emphasis competency mean score was computed as 36.8 (median = 40; standard deviation = 10.36). A mean score of 36.8 indicates that McNair students perceive faculty mentor relationship emphasis competency level as "less effective" (score of 36 to 38). According to Cohen (1995), scores of 39 to 41 are considered "effective" in this competency area.

Individual faculty mentor information emphasis competency scores ranged from 9 to 45. Scores such as these categorize individual McNair faculty mentors as "not effective" (score of 10 to 33) to "highly effective" (score of 43 to 50) in the information emphasis competency area. The information emphasis competency mean score for all faculty mentors was computed as 32 (median = 33; standard deviation = 9.24). A mean score of 32 indicates that McNair students perceive faculty information emphasis competency level as "not effective" (score of 10 to

33). Based on Cohen's model, scores of 37 to 39 are considered "effective" in this competency area.

In the area of student vision competency, individual McNair faculty mentor scores ranged from 11 to 55. Scores reported categorize individual faculty mentor competency level as "not effective" (score of 11 to 37) to "highly effective" (score of 48 to 55). The student vision competency mean score for all faculty mentors was computed as 39.9 (median = 44; standard deviation = 12.30). A mean score of 39.9 indicates that McNair students perceive faculty student vision competency level as "less effective" (score of 38 to 41). A score of 42 to 44 is considered effective in this competency area.

#### Statistical Results

Primarily investigated in this study was faculty mentor competency, as perceived by McNair Program participants, in three areas (relationship emphasis competency, information emphasis competency, and student vision competency) and whether such competency significantly predicts McNair student intent to attain a doctoral degree and awareness of graduate school when controlling for GPA and parental educational levels. Reliability for the adapted survey instrument was calculated using Cronbach's alpha technique, which produced a reliability coefficient of  $\alpha = .976$ . Survey participants responded to questions (4-34 in McNair Program section) using a 5-point Likert scale ranging from *Never* (1) to *Always* (5).

Regression analysis is typically utilized when most independent variables are continuous; however, dummy coding allows categorical variables to be

included in the regression analysis (Holton & Burnett, 2005). The dummy coding technique was employed to include nominal data, GPA and parental education levels, in the sequential multiple regression analysis for Hypotheses 1 and 2. Further, GPA and parental education levels are used as control variables in the statistical analysis of both hypotheses.

### *Hypothesis 1 Results*

The first outcome, intent to attain a doctoral degree, is examined in Hypothesis 1. Hypothesis 1 was tested using the equation below where PhDIntent represents intent to attain a doctoral degree, RltnEmph represents relationship emphasis competency, InfoEmph represents information emphasis competency, StdVsn represents student vision competency, GPA represents undergraduate GPA level, and PrntEd represents parental educational level. Further, GPA and parental educational levels served as control variables. This study used a significance level of .05 for the test.

Hypothesis 1: Faculty mentor relationship emphasis competency, information emphasis competency, and student vision competency scores can significantly predict the McNair Program student intent to attain a doctoral degree, controlling for GPA and parental education levels.

Independent variables were entered into the regression in blocks. Independent (control) variables GPA levels (GPA) and parental education



(PrntEd) levels were entered in the regression in Block 1. Results for Block 1 are  $R^2 = .211$ ,  $F [7, 62] = 2.367$ ,  $p = .033$ . The tested model, which is of greater interest to the researcher, was entered in Block 2. Block 2 results are  $R^2 = .106$ ,  $F [10, 59] = 2.732$ ,  $p = .008$ . The significant increase in variance in Block 2 indicates that the addition of relationship emphasis competency (RltnEmph), information emphasis competency (InfoEmph), and student vision competency (StdVsn) scores are significant in explaining McNair student intent to attain a doctoral degree. Analysis results for Hypothesis 1 are shown in Table 4.

Coefficients were analyzed for Hypothesis 1 dependent variable “intent to attain a doctoral degree.” The single individually significant ( $p = .001$ ) impact on “intent to attain a doctoral degree” is the “GPA 2.0-2.49” level of GPA variable. However, this impact is negative ( $\beta = -.403$ ).

Table 4

*Results of Sequential Regression Models of Intent to Attain a Doctoral Degree*

Variables	Intent to Attain a Doctoral Degree	
	Block 1	Block 2
No parent completed HS	.119	.148
At least one parent has some college degree	-.052	-.014
One parent graduated college	-.109	-.121
One parent has graduate degree	.014	.007
GPA 2.0 - 2.49	-.414**	-.403**

Table 4 (continued).

Variables	Intent to Attain a Doctoral Degree	
	Block 1	Block 2
GPA 2.5 - 2.99	- .189	- .190
GPA 3.0 – 3.49	- .129	- .173
Relationship Emphasis Competency		.193
Information Emphasis Competency		- .483
Student Vision Competency		.520
F	2.367	2.732
Degrees of Freedom	7	10
Adj. R-squared	.122	.201
Change in R-squared		.106*

Note. Standardized coefficients reported.

\* p < .05

\*\* p < .01

\*\*\*p < .001

### *Hypothesis 2 Results*

A second hypothesis was established to investigate McNair student awareness of graduate school. For consistency purposes, sequential regression analysis was utilized to analyze data for Hypothesis 2. The equation below tested Hypothesis 2 where *AwrnsGS* represents awareness of graduate school, *RltnEmph* represents relationship emphasis competency, *InfoEmph* represents information emphasis competency, *StdVsn* represents student vision competency, *GPA* represents undergraduate GPA level, and *PrntEd* represents

parental educational level. Again, GPA and parental educational levels are the control variables. A significance level of .05 was used for the test.

Hypothesis 2: Faculty mentor relationship emphasis competency, information emphasis competency, and student vision competency scores can significantly predict the McNair Program student awareness of graduate school, controlling for GPA and parental education levels.

Independent variables were entered into the regression in blocks. Independent variables GPA and parental education (PrntEd) levels were entered in the regression in Block 1. Results for Block 1 are  $R^2 = .147$ ,  $F [7, 61] = 1.503$ ,  $p = .183$ . The tested model, which remains the primary interest of the researcher, was entered in Block 2. Block 2 results are  $R^2 = .282$ ,  $F [10, 58] = 4.359$ ,  $p = .001$ . The significant increase in variance in Block 2 indicates that the addition of relationship emphasis competency (RltnEmph), information emphasis competency (InfoEmph), and student vision competency (StdVsn) scores are important in explaining McNair student awareness of graduate school. Analysis results for Hypothesis 2 are shown in Table 5.

Coefficients were analyzed for Hypothesis 2 dependent variable “awareness of graduate school.” Results reveal student vision competency ( $\beta = .763$ ) has strong impact on “awareness of graduate school.” This impact is positive and individually significant ( $p = .021$ ).

Table 5

*Results of Sequential Regression Models of Awareness of Graduate School*

Variables	Awareness of Graduate School	
	Block 1	Block 2
No parent completed HS	.066	.095
At least one parent has some college degree	-.180	-.152
One parent graduated college	.217	.202
One parent has graduate degree	-.198	-.131
GPA 2.0 - 2.49	.013	-.054
GPA 2.5 - 2.99	-.029	-.064
GPA 3.0 – 3.49	-.039	-.143
Relationship Emphasis Competency		-.352
Information Emphasis Competency		.086
Student Vision Competency		.763*
F	1.503	4.359
Degrees of Freedom	7	10
Adj. R-squared	.049	.331
Change in R-squared		.282***

Note. Standardized coefficients reported.

\* p<.05

\*\* p<.01

\*\*\*p<.001

## Summary

The population for this study consisted of McNair Program participants (N = 164) from six universities in gulf coast states (Alabama, Louisiana, and Mississippi). The entire population of McNair students from the six universities was surveyed for this study. Seventy-seven (77) students responded to the survey, yielding a response rate of 46.9%. Accordingly, descriptive statistics were reported for respondents. Overall, 91.5% (n = 64) of McNair participants indicate they are satisfied with the McNair Program faculty mentoring experience, while 4.3% (n = 3) are neutral and 4.3% (n = 3) are somewhat dissatisfied with the mentoring experience.

A sequential multiple regression analysis was conducted to assess whether McNair student intent to attain a doctoral degree and awareness of graduate school could be significantly predicted from faculty mentor relationship emphasis competency, information emphasis competency, and student vision competency scores. GPA and parental education levels were control variables in the statistical analysis. The evaluations of linearity, normality, homoscedasticity, and multicollinearity showed that the assumptions were met within acceptable limits for both hypotheses.

Hypothesis 1 tested whether faculty mentor competency in the three areas assessed significantly predicted McNair student intent to attain a doctoral degree, even after controlling for the effects of GPA and parental education levels. Study results indicate that these competencies are statistically significant in predicting attainment of a doctoral degree (  $R^2 = .106$ ,  $F [10, 59] = 2.732$ ,  $p = .008$ ).

Further analysis of coefficients for the dependent variable “intent to attain a doctoral degree (PhDIntent)” found “GPA 2.0-2.49” level of the GPA individually significant ( $\beta = .001$ ) and negative ( $\beta = -.403$ ).

Similarly, Hypothesis 2 tested whether the same faculty mentor competencies significantly predict McNair student “awareness of graduate school,” over and beyond the effects of GPA and parental education levels. Sequential multiple regression analysis reveal such competencies significantly predict McNair student “awareness of graduate school” ( $R^2 = .282$ ,  $F [10, 58] = 4.359$ ,  $p = .001$ ). An analysis of coefficients for the dependent variable “awareness of graduate school” reveal student vision competency ( $\beta = .763$ ) has strong impact, is positive and individually significant ( $\beta = .021$ ). As study results were presented within this chapter, succeeding is a discussion of study conclusions, McNair Program mentoring component implications, and recommendations for future research.

## CHAPTER V

### DISCUSSION

#### Summary

The purpose of this nonexperimental cross-sectional, predictive study was to determine if McNair faculty mentor relationship emphasis competency, information emphasis competency, and student vision competency scores significantly predict the McNair student intent to attain a doctoral degree and awareness of graduate school. Previous research on the McNair Program mentoring component focuses on program goals and satisfaction. Minimal research exists on the McNair Program overall, and no research focuses on McNair faculty mentor competency. Therefore, this study adjoins the element of specific mentor competency to previous works (Carrera, 2002; Vincent & Broussard, 1998) to determine if faculty mentor competency impacts the goals of the McNair Program mentoring component.

#### Conclusions and Discussion

The McNair Program operates in 48 states, the District of Columbia, and Puerto Rico (U.S. Department of Education, 2010). Along the gulf coast region of the United States, McNair Programs are found in Alabama, Louisiana, and Mississippi. McNair Program participants, totaling 164 from six universities (The University of Alabama/Tuscaloosa, University of Montevallo, University of Louisiana/Lafayette, Jackson State University, University of Mississippi, and The University of Southern Mississippi) in the gulf coast region form the population for this study.

Mentoring is a tool utilized by the McNair Program to aid students in preparing for the rigor of graduate school. Although a widely utilized human capital development tool within the McNair Program, the mentoring component is *not* a required element of McNair (Code of Federal Regulations, 2009). This study explores McNair Program faculty mentor competency in three areas, as perceived by the McNair Program participant. The study further assesses the impact of such competency (Cohen's [1993, 1995] relationship emphasis, information emphasis, and student vision competencies) on the outcome of McNair Program goals as defined by Carrera (2002). Hypothesis 1 tests whether faculty mentor competency scores significantly predict McNair student intent to attain a doctoral degree. Hypothesis 2 tests whether faculty mentor competency scores significantly predict McNair student awareness of graduate school.

Sequential multiple regression analysis was performed to assess the study prediction, while controlling for GPA and parental education levels. Statistically significant evidence supporting both Hypotheses 1 and 2 resulted from the analysis. Therefore, faculty mentor relationship emphasis competency, information emphasis competency, and student vision competency scores *significantly* predict the McNair student intent to attain a doctoral degree and awareness of graduate school, beyond the effects of GPA and parental education levels.

Of the three competency areas assessed, student vision competency has the strongest impact on "awareness of graduate school." A positive relationship exists between student vision competency and "intent to attain a doctoral degree"



and “awareness of graduate school.” Although a positive relationship exists between the variables, the relationship is only statistically significant between student vision competency and “awareness of graduate school” ( .

Predictor variables relationship emphasis competency and information emphasis competency are not individually statistically significant in either of the study’s two hypotheses. Although not statistically significant, such results may be significant in practice. Lomax (2001) maintains that statistically significant results are not always significant in practice and that practical significance is not entirely a statistical matter. Relationship emphasis competency and information emphasis competency in practice are significant to the McNair mentoring component, as behaviors exemplified in both competency areas represent foundations of effective mentoring (Cohen, 1993, 1995; Dolaz, 1986, 1999; Kram, 1980; Levinson et al., 1978). Relationship emphasis competency involves active listening, understanding, and acceptance of the mentee’s feelings. Such skills perpetuate a climate of trust. Further, information emphasis involves soliciting detailed information and offering specific suggestions regarding current plans and progress in achieving goals (Cohen, 1995).

Relationship emphasis competency has a positive impact on “intent to attain a doctoral degree”; however, information emphasis competency has a negative impact on “intent to attain a doctoral degree.” On the surface, a negative relationship between information emphasis competency and “intent to attain a doctoral degree” appears odd. However, McNair students are involved in numerous required activities, including academic counseling and educational

seminars (Code of Federal Regulations, 2009). Such activities provide information and guidance separate from the mentoring experience. It is plausible to ascertain McNair students receive additional guidance from others, such as McNair Program staff, when participating in academic counseling sessions and seminars. Since assessment of McNair Program staff roles and effectiveness are not within the scope of this research, the researcher draws no conclusions regarding McNair Program staff's role and effectiveness.

#### *Conclusion 1*

Considering faculty mentor competency scores in the three areas assessed (based on Cohen's [1995] competency model scoring), study participants perceive that faculty mentor competency needs enhancement and further development. Of particular note, some individual mentors are perceived as competent and highly effective in the three competency areas. In contrast, when faculty mentors are scored as a group (based on the Principles of Adult Mentoring Scale-Postsecondary Education competency assessment tool scores) faculty mentors are not perceived as competent. The researcher concludes competency-based training with specific focus on student vision competency is needed to build faculty mentor competency.

#### *Recommendations for Conclusion 1*

Supported by study results and based on conclusions drawn, the researcher provides the following recommendations for policy and practice related to Conclusion 1.

1. U.S. Department of Education should establish an easily accessible web-based learning and development tool, which focuses on building and enhancing specific faculty mentor competency (particularly student vision competency).
2. U.S. Department of Education should provide information and guidance on best practices for the McNair Program mentoring component.
3. U.S. Department of Education should *recommend* to all McNair Programs (i.e., grantees) that faculty mentors participating in the McNair Program complete an individual self-assessment of overall competency level using the Principles of Adult Mentoring Scale - Postsecondary Education tool (Cohen, 1995) prior to engaging in a mentoring relationship with McNair students.
4. All McNair Programs should require faculty mentors to self-assess their competency prior to engaging the McNair student and routinely assess the level of interaction and engagement between the McNair student and faculty mentor.
5. All McNair Programs should update current mentor training materials to include information on faculty mentor competency elements to enhance mentor knowledge on the behaviors needed to facilitate a positive, effective mentoring partnership.

### *Conclusion 2*

Three competency areas assessed in this study significantly predict the McNair student intent to attain a doctoral degree and awareness of graduate

school. Attainment of a doctoral degree and awareness of graduate school serve as measures of effectiveness for the McNair Program mentoring component (Carerra, 2002). Therefore, the researcher concludes mentor competency aids in the achievement of McNair Program goals. Study results also indicate a need for mentor competency development in the three areas assessed. Cohen's (1993, 1995) competency model for faculty mentors in higher education provides a springboard for development of a competency model specifically addressing critical competencies needed for effective mentoring in the McNair Program.

#### *Recommendations for Conclusion 2*

Supported by study results and based on conclusions drawn, the researcher provides the following recommendations for policy and practice related to Conclusion 2:

1. The U.S. Department of Education, or a supporting institution or organization, create and validate a McNair Program faculty mentor competency model to be used by McNair Programs as a tool; and
2. McNair Program utilize competency model to communicate faculty mentor roles and expectations, align mentor behaviors with the goals of the McNair Program, and aid in faculty mentor selection.

Current study results support previous research findings of Vincent and Broussard (1998) in two areas. Primarily, Vincent and Broussard's study reveals McNair mentors should be better prepared for their roles and receive prior training and orientation on the mentor's role and responsibilities. Current study participants perceive faculty mentor competency levels need improvement.

Faculty mentor lack of competency in the areas of relationship emphasis, information emphasis, and student vision competencies support Vincent and Broussard's research.

A second area of alignment between the current study and Vincent and Broussard's work is the large percentage of McNair participants indicating plans to attend graduate school. In Vincent and Broussard's study, 95.6% of study participants indicate they plan to attend graduate school. Accordingly, 89.7% of current study participants state "definitely yes" they plan to attend graduate school and 3.8% currently attend graduate school. In essence, McNair students are satisfied with the faculty mentoring experience and recognize that faculty mentors need preparation for their roles as mentors.

Jacobi (1991) maintains that research is needed to support the link between mentoring and academic success. Current study findings provide statistically significant evidence that mentor competency predicts student intent to attain a doctoral degree and awareness of graduate school, when controlling for GPA and parental educational level. Further, McNair students indicate faculty mentoring experiences are somewhat beneficial in increasing knowledge of graduate school.

#### Limitations

Limitations of the current study were outlined in Chapter I. Study results may not be applicable to college students in an informal mentoring relationship and college students in a formal mentoring partnership within a specialized university program other than McNair. Study results are not generalizable to

studies in which faculty mentors are included as subjects and complete the mentor competency assessment. Consumers of research will determine how to appropriately apply this research in policy and practice.

#### Recommendations for Future Research

A thorough review of literature reveals no attention focuses on the faculty mentor competency and how such competency impacts the success of McNair Program goals. This research adds to the body of literature on the McNair Program and fills a gap in the literature regarding faculty mentor competency impact on McNair Program goals. This research also provides specific competencies for which future faculty mentor training may be based.

Future, additional McNair Program mentoring component research is needed particularly with a focus on: a) interventions which build and enhance McNair Program faculty mentor competency; b) McNair Program mentoring component best practices; c) faculty mentor competency using Cohen's model; and d) the creation and validation of a McNair mentor competency model. Whereas minimal research exists on the McNair Program and far less on the mentoring component, the current researcher strongly urges future researchers to answer this call for additional research. Research efforts in the aforementioned areas can contribute to more efficient and effective McNair Program mentoring practices.

#### Conclusion

Mentoring is referred to as a magical and transformational relationship (Dolaz, 1999). Yet, one must go beyond the myths and magic to realize that effective mentoring requires sufficient attention and cooperation on behalf of both

the mentor and mentee. Although both parties have equally important roles and responsibilities in the success of mentoring outcomes, mentor competency is an important element which possibly determines whether a mentee is mentored or “tormented.” Arguably, mentor competency is at the foundation or core of whether a mentoring relationship is considered effective and successful.

However, this study provides statistical evidence supporting the critical need for competent faculty mentors functioning in the McNair Program.

APPENDIX A  
THE UNIVERSITY OF SOUTHERN MISSISSIPPI  
INSTITUTIONAL REVIEW BOARD LETTER



THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board

118 College Drive #5147  
Hattiesburg, MS 39406-0001  
Tel: 601.266.6820  
Fax: 601.266.5509  
www.usm.edu/irb

**HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE  
NOTICE OF COMMITTEE ACTION**

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: **10111603**

PROJECT TITLE: **Set Up for Success: An Examination of the Ronald E. McNair Postbaccalaureate Achievement Program's Mentoring Component**

PROPOSED PROJECT DATES: **11/15/2010 to 05/01/2011**

PROJECT TYPE: **Dissertation**

PRINCIPAL INVESTIGATORS: **Dwuena Cene' Wyre**


COLLEGE/DIVISION: **College of Science & Technology**

DEPARTMENT: **DEWD**

FUNDING AGENCY: **N/A**

HSPRC COMMITTEE ACTION: **Expedited Review Approval**

PERIOD OF APPROVAL: **11/29/2010 to 11/28/2011**

  
\_\_\_\_\_  
Lawrence A. Hosman, Ph.D.  
HSPRC Chair

12-01-2010  
Date



## APPENDIX B

## PARTICIPANT CONTACT NUMBER 1



Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

---

## McNair Program Study Invite

Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

Mon, Jan 10, 2011 at 4:51 PM

To: Nancy.Campbell@ua.edu, PayneT@montevallo.edu, jmc8984@louisiana.edu, Susan.Bourland@usm.edu, dherefor@olemiss.edu, loria.c.brown@jsums.edu

Cc: Cyndi Gaudet <cyndi.gaudet@usm.edu>, Dwuena Wyre <dwuena.wyre@eagles.usm.edu>, dcole@olemiss.edu

Dear McNair Scholar:

My name is Dwuena Wyre and I am a doctoral candidate at The University of Southern Mississippi. My research focuses on the McNair Program's mentoring component. I am seeking your help to complete a survey regarding your mentoring experience.

As a McNair scholar, you know the value of the McNair Program and the opportunity it affords individuals. You may *not* know that very little research exists on the McNair Program and even less on mentoring in the McNair Program. Your participation in this study could change this. **The first 50 McNair scholars to complete the survey receive a gift card/certificate (ex. McDonalds, Pizza Hut, Starbucks)!**

**During the week of January 17th the web survey will be forwarded to you from your McNair Program Director.** It will take approximately 20 minutes to complete. Your participation is voluntary and your identity will remain anonymous. Individual responses are confidential. Your answers to questions confirm your consent to participate. If you have any questions about this research you may contact me, Dwuena Wyre, at 228-214-3493 or at [dwuena.wyre@eagles.usm.edu](mailto:dwuena.wyre@eagles.usm.edu). Thanks in advance for your participation.

Best Regards,

Dwuena C. Wyre  
Doctoral Candidate  
The University of Southern Mississippi

## APPENDIX C

## PARTICIPANT CONTACT NUMBER 2



Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

---

**Subject: McNair Program Mentoring Survey**

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Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

Fri, Jan 14, 2011 at 4:33 PM

To: loria.c.brown@jsums.edu, "Campbell, Nancy" <Nancy.Campbell@ua.edu>, Joseph M Cotton <jmc8984@louisiana.edu>, Demetria Hereford <dherefor@olemiss.edu>, Susan Bourland@usm.edu, "Payne, Tracy" <paynet@montevallo.edu>

Cc: terri.l.ballansaw@jsums.edu, Cyndi Gaudet <cyndi.gaudet@usm.edu>, dcole@olemiss.edu, Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

Dear McNair Scholar:

Your input and participation in this study of the McNair Program can help increase awareness about the McNair Program and the benefits of the mentoring experience. It will take you approximately 20 minutes to complete this survey. **Your response is needed by February 4th.**

Simply click on the link below, or cut and paste the entire URL into your browser to access the survey:

[http://www.surveymonkey.com/s/McNair\\_Mentoring](http://www.surveymonkey.com/s/McNair_Mentoring)

Your participation is voluntary and your identity will remain anonymous. Individual responses are confidential. Your answers to questions confirm your consent to participate.

**As one of the first 50 survey completers, you are eligible to receive a gift card/certificate!** To receive your gift, complete the survey and send your e-mail address and university name to [dwuena.wyre@eagles.usm.edu](mailto:dwuena.wyre@eagles.usm.edu) with the wording "McNair First 50" in the subject line. Gift cards/certificates will be e-mailed directly to you or mailed to your McNair Program office, and are redeemable at various locations (ex. McDonalds, Pizza Hut, Starbucks).

If you experience technical difficulties accessing or submitting the survey please contact Dwuena Wyre at [dwuena.wyre@eagles.usm.edu](mailto:dwuena.wyre@eagles.usm.edu). You may also contact me, Dwuena Wyre, if you have questions regarding this research. Thanks for your participation.

Best Regards,  
Dwuena C. Wyre  
Doctoral Candidate  
The University of Southern Mississippi

## APPENDIX D

## PARTICIPANT CONTACT NUMBER 3



Dwuena Wyre &lt;dwuena.wyre@eagles.usm.edu&gt;

---

**McNair Study Deadline Approaching**

---

Dwuena Wyre &lt;dwuena.wyre@eagles.usm.edu&gt;

Wed, Jan 26, 2011 at 5:22 PM

To: "Campbell, Nancy" <Nancy.Campbell@ua.edu>, "Payne, Tracy" <PayneT@montevallo.edu>, Joseph M Cotton <jmc8984@louisiana.edu>, Demetria Hereford <dherefor@olemiss.edu>, Susan Bourland <Susan.Bourland@usm.edu>, loria.c.brown@jsums.edu

Cc: Cyndi Gaudet <cyndi.gaudet@usm.edu>, terri.l.ballansaw@jsums.edu

Dear McNair Scholar:

Don't wait to participate—act now by completing the survey below regarding your McNair Program and mentoring experience. ***The first 50 survey completers receive a gift card/certificate!*** Gift cards are still available.

Simply click on the link below, or cut and paste the entire URL into your browser to access the survey:

**[http://www.surveymonkey.com/s/McNair\\_Mentoring](http://www.surveymonkey.com/s/McNair_Mentoring)**

**Your response is needed today! Upon completing the survey you will receive details on how to receive your gift card/certificate. Please follow the instructions to receive your gift card.** Gift cards/certificates are redeemable at various locations (ex. McDonalds, Pizza Hut, Starbucks).

Very little research exists on the McNair Program, so let's change this one study at a time. You can make a difference in 20 minutes, the time it will take you to complete this survey. ***Survey responses are needed by February 4th.*** If you experience technical difficulties accessing or submitting the survey please contact Dwuena Wyre at [dwuena.wyre@eagles.usm.edu](mailto:dwuena.wyre@eagles.usm.edu). You may also contact me, Dwuena Wyre, if you have questions regarding this research. Thanks for your participation.

Best Regards,

Dwuena C. Wyre  
Doctoral Candidate  
The University of Southern Mississippi

APPENDIX E  
SURVEY INSTRUMENT

**McNair Program Mentoring Component Survey**  
**2. Demographic Information**

Please respond to the following questions as they relate only to your McNair Program mentoring experience.

**\* 1. Gender**  
 Male  
 Female

**\* 2. Age**

**\* 3. Ethnic Origin**  
 Caucasian/White  
 Hispanic/Latino  
 African American/Black  
 Asian American/Pacific Islander  
 Not in American/Not Indian  
 Other (please specify)

**\* 4. My parents' educational level is:**  
 At least one has a graduate degree  
 At least one graduated from college  
 At least one had some college  
 At least one graduated from high school  
 No parent completed high school

**\* 5. I am classified as:**  
 Freshman  
 Sophomore  
 Junior  
 Senior  
 Graduate Student

**McNair Program Mentoring Component Survey**  
**3. McNair Program Mentoring Component Survey**

Thanks for participating in the McNair mentoring study. The first 50 people to complete the survey receive a gift certificate (ex. McDonalds, Pizza Hut, Starbucks). Your participation is voluntary and your identity will remain anonymous. Individual responses are confidential. Responding to the questions below confirms your consent to participate. If you have any questions about this research you may contact me, Diwerna Wynn, at 228-214-5459 or at diwerna.wynn@mcnair.lsu.edu.

McNair Program Mentoring Component Survey

\* 6. My undergraduate GPA on a 4.0 scale is/was:

- 3.5 - 4.0
- 3.0 - 3.49
- 2.5 - 2.99
- 2.0 - 2.49
- 1.5 - 1.99
- 1.0 - 1.49
- 0.99 and below

McNair Program Mentoring Component Survey

3. Educational Goals

\* 1. The highest degree I anticipate attaining is:

- Bachelor's Degree
- Master's Degree
- Doctoral Degree

Other (please specify):

\* 2. I am planning to attend graduate school.

- Definitely Not
- Not Likely
- Maybe
- Probably Yes
- Definitely Yes
- Currently in graduate school

\* 3. I intend to earn my Master's Degree.

- Definitely Not
- Not Likely
- Maybe
- Probably Yes
- Definitely Yes

\* 4. I intend to earn my Doctoral Degree.

- Definitely Not
- Not Likely
- Maybe
- Probably Yes
- Definitely Yes

**McNair Program Mentoring Component Survey**

**4. Professional Organizations**

\* 1. Are you aware of professional organizations in your field of study?

- Yes  
 No

**McNair Program Mentoring Component Survey**

**5. Professional Organizations II**

1. Are you a member of any of these professional organizations?

- Yes  
 No

McNair Program Mentoring Component Survey

B. Professional Organizations III

\* 1. Have you attended any professional conferences in your field?

- Yes
- No

McNair Program Mentoring Component Survey

7. McNair Program

\* 1. How long have you been/were a participant in the Ronald E. McNair Postbaccalaureate Achievement Program?

- 1 - 5 months
- 6 - 10 months
- 11 - 15 months
- 16 - 20 months
- 21 - 25 months

Other (please specify) \_\_\_\_\_

\* 2. How long have you been paired with your mentor?

- 1 - 5 months
- 6 - 10 months
- 11 - 15 months
- 16 - 20 months
- 21 - 25 months

Other (please specify) \_\_\_\_\_

\* 3. Please select (as many as apply) the types of activities in which you and your faculty mentor engaged.

- Research project
- Undergraduate research
- Professional networking
- Discussion of writing/publishing
- Mentoring (during your mentor's work)
- Attending meetings in classroom
- Research and testing (i.e. lab work, statistics, computer knowledge, etc.)
- Career development (i.e. resume writing, career coaching, interview techniques, etc.)

Other (please specify) \_\_\_\_\_

**McNair Program Mentoring Component Survey**

\* 4. My mentor encouraged me to express my honest feelings (positive and negative) about my academic and social experiences as an adult learner in college.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 5. My mentor attempted to be verbally supportive when I was emotionally upset.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 6. My mentor made a good deal of eye contact with me.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 7. My mentor explained to me that he/she really wanted to know what I as an individual honestly thought about issues (such as balancing college commitments and outside responsibilities) so that he/she could offer advice specific to me.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

**McNair Program Mentoring Component Survey**

\* 8. My mentor arranged our meetings (when possible) at times when he/she would probably not be interrupted very much by telephone calls or other people.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 9. My mentor verbally communicated his/her concerns to me when my negative attitude and emotions were expressed to him/her through such nonverbal behaviors as eye contact, body language, facial expressions, and voice tone.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 10. My mentor listened to criticism from me about college policies, regulations, requirements, and even his/her colleagues without immediately attempting to offer justifications.

- Never
- Infrequently
- Sometimes
- Frequently
- Always



**McNair Program Mentoring Component Survey**

\* 11. My mentor informed me that I could discuss "negative" emotions such as anxiety, self-doubt, fear, and anger in our meetings.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 12. My mentor discussed with me the positive and negative feelings I have about my ability to succeed as an adult learner.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 13. My mentor tried to clarify the problems I explained to him/her by verbally expressing his/her understanding of my feelings, and then asking me if his/her views were accurate.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 14. My mentor asked me for detailed information about my academic progress?

- Never
- Infrequently
- Sometimes
- Frequently
- Always

**McNair Program Mentoring Component Survey**

\* 15. My mentor referred me to other staff members and departments to obtain information I needed about academic and career plans.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 16. My mentor suggested to me that we establish a regular schedule of meeting times.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 17. My mentor asked me to explain (in some detail) the reasons for my college plans and career choices.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 18. My mentor encouraged me to provide a good deal of background information about my academic preparation, success, and issues experienced in college.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

**McNair Program Mentoring Component Survey**

\* 19. My mentor inquired, in some depth, about my study strategies and (if necessary) offered practical suggestions and/or referred me for help to improve my academic performance.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 20. My mentor offered recommendations to me about my personal academic learning needs (from remedial to honors courses, tutoring, course loads) based on specific information provided by me (including placement tests and academic records, if available) during our meetings.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 21. My mentor discussed my general reasons for attending college, and then focused on helping me identify specific educational objectives, degrees, curricula, and courses.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

**McNair Program Mentoring Component Survey**

\* 22. My mentor assisted me in using facts (grades, personal interests, major) to carefully map out realistic step-by-step strategies to achieve my academic and career goals.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 23. My mentor discussed his/her role as a mentor with me so that his/her individual expectations of me were appropriate and realistic.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 24. My mentor explained the need to explore degree and career options to me when I had insufficient information (such as adult learners in transition between job fields or facing long-term commitments to fulfill degree requirements).

- Never
- Infrequently
- Sometimes
- Frequently
- Always

**McNair Program Mentoring Component Survey**

\* 25. My mentor tried to stimulate me to do more rigorous critical thinking about the long-range implications (time commitments, lifestyle changes) my academic choices may have for increasing the complexity of my life.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 26. My mentor followed-up at later meetings on my decisions to develop better personal strategies (study habits, getting accurate information, making realistic decisions) by asking questions and offering comments, if appropriate, about my actual progress.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 27. My mentor asked to review my strategies for managing the changes in my life (such as impact of increased time pressures on personal relationships or ability to handle current job) while I pursue my "dreams" regarding educational goals.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

**McNair Program Mentoring Component Survey**

\* 28. My mentor engaged me in discussions which required me to reflect on the new competencies I will need to achieve my future goals.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 29. My mentor engaged me in discussions aimed at motivating me to develop a positive view of my ability to function now and in the future as an independent, competent adult learner.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 30. My mentor encouraged me to make well-informed personal choices as I plan my own educational and career choices.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

**McNair Program Mentoring Component Survey**

\* 31. My mentor expressed confidence in my ability to achieve my educational goal, especially when I had personal difficulties in fulfilling my academic responsibilities due to outside pressures (work, family, relationships).

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 32. My mentor explored with me the extent of my commitment (such as willingness to spend time and energy) as an adult learner in achieving my educational goals.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 33. My mentor asked me to reflect on the resources available (college, family, community) to help me manage my life effectively while I pursue my educational and career goals.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

**McNair Program Mentoring Component Survey**

\* 34. My mentor emphasized to me, especially when I appeared uncertain about what to expect from our meetings, that one of his/her important goals is to assist me in reaching my own decisions about personal, academic, and career goals.

- Never
- Infrequently
- Sometimes
- Frequently
- Always

\* 35. What is your level of satisfaction with the faculty mentoring experience through the Ronald E. McNair Post-Baccalaureate Achievement Program?

- Extremely Dissatisfied
- Somewhat Dissatisfied
- Neutral
- Somewhat Satisfied
- Extremely Satisfied

**McNair Program Mentoring Component Survey**  
**9. Mentoring Partnership**

\* 1. If applicable, do you think that the age difference between you and your faculty mentor was of any significance?

Definitely Not  
 Probably Not  
 Maybe  
 Probably Yes  
 Definitely Yes  
 Not Applicable (I think we are close in age.)

**McNair Program Mentoring Component Survey**  
**8. Graduate School**

For the questions below, please rate how beneficial the faculty mentoring experience was in increasing your knowledge in the following areas:

\* 1. Mark one choice per row with 1 = not at all beneficial, 3 = neutral and 5 = extremely beneficial.

	1	2	3	4	5
Clarivate program information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Selection of graduate programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assistance to graduate school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preparation for graduate school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
GRE preparation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial assistance for graduate school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Library skills - for and research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Research findings presentation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scholarly conferences/professional events	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical writing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stress management/skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teaching skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interpersonal/relational/communication skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
McNair selection/mentorship	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Computer literacy (e-mail, internet, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal statement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parts of a graduate application	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professional speaking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poster presentation - how to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Career resolution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

McNair Program Mentoring Component Survey

10. Mentoring Partnership: (cont)

1. The age difference made the relationship:

- Better
- Worse

McNair Program Mentoring Component Survey

11. Mentoring Partnership: (cont)

\* 1. If applicable, do you think the gender difference between you and your faculty mentor was of any significance?

- Definitely Not
- Probably Not
- Maybe
- Probably Yes
- Definitely Yes
- Not applicable (My faculty mentor is the same gender.)

McNair Program Mentoring Component Survey

12. Mentoring Partnership (cont)

1. The gender difference made the relationship:

- Better
- Worse

McNair Program Mentoring Component Survey

13. Mentoring Partnership (cont)

\* 1. If applicable, do you think the ethnicity difference between you and your faculty mentor was of any significance?

- Definitely Not
- Possibly Not
- Maybe
- Possibly Yes
- Definitely Yes
- Not Applicable (My faculty mentor is the same ethnicity.)

**McNair Program Mentoring Component Survey**

**14. Mentoring Partnership (cont)**

1. The ethnicity difference made the relationship:

- Better
- Worse

**McNair Program Mentoring Component Survey**

**15. Mentoring Partnership (cont)**

1. Please provide any additional comments about your faculty mentoring experience here.

--



**McNair Program Mentoring Component Survey**

**16. Thank You**

Thanks for completing the survey! If you are one of the first 50 survey completers, you are eligible to receive a gift certificate. To receive your gift, you must send your e-mail address and university name to [deurana.wynn@engr.usm.edu](mailto:deurana.wynn@engr.usm.edu) with the wording "McNair First 50" in the subject line.

## APPENDIX F

## MCNAIR FIRST FIFTY CONFIRMATION



Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

---

**McNair First 50**

Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

Thu, Jan 27, 2011 at 10:53 AM

Dear McNair Scholar,

Thanks for completing the McNair Mentoring Survey! First Fifty responders must use this e-mail to claim gift cards.

A **Starbucks** gift card will be mailed to your McNair Program office at the University of Alabama. Please allow two weeks for your card to arrive. If your card does not arrive within 2 weeks, please email [dwuena.wyre@eagles.usm.edu](mailto:dwuena.wyre@eagles.usm.edu).

I hope you will encourage other McNair Scholars to participate in this study, as your participation is greatly appreciated.

Best Regards,

Dwuena C. Wyre  
 Doctoral Candidate  
 The University of Southern Mississippi



Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

---

**McNair First 50**

Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

Thu, Jan 27, 2011 at 12:17 PM

Dear McNair Scholar,

You will receive a \$5 eGift Card from Pizza Hut. Your eGift Card is scheduled for delivery on January 27, 2011, to : If you do not receive your gift card by the delivery date contact [dwuena.wyre@eagles.usm.edu](mailto:dwuena.wyre@eagles.usm.edu).

Thanks for completing the McNair Mentoring Survey! I hope you will encourage other McNair Scholars to participate in this study, as your participation is greatly appreciated.

Best Regards,

Dwuena C. Wyre  
 Doctoral Candidate  
 The University of Southern Mississippi

## APPENDIX G

## INDEPENDENT VARIABLE TABLE

<b>Variable</b>	<b>Question(s)</b>	<b>Response Option</b>	<b>Code</b>
<p><b>Relationship Emphasis Competency</b> Involves active listening, understanding, and acceptance of the mentees' feelings. The mentors' behaviors (i.e. listening and not judging) promote a climate of trust, which allows the mentees to honestly share and reflect on their experiences.</p>	<p>4 - 13 (McNair Program Section)</p>	<p>1 = Never 2 = Infrequently 3 = Sometimes 4 = Frequently 5 = Always</p>	<i>IV<sub>1</sub></i>
<p><b>Information Emphasis Competency</b> Involves soliciting detailed information and offering specific suggestions regarding current plans and progress in achieving goals (ex. personal, educational, and career). Advice offered is based on accurate and sufficient information.</p>	<p>14 - 23 (McNair Program Section)</p>	<p>1 = Never 2 = Infrequently 3 = Sometimes 4 = Frequently 5 = Always</p>	<i>IV<sub>2</sub></i>
<p><b>Student Vision Competency</b> Involves stimulating mentees' critical thinking in regard to envisioning their future and developing potential. Encouragement is given to mentees to function as independent adult learners, take initiative to manage change, and to negotiate constructive transitions through personal and workplace events.</p>	<p>24 – 34 (McNair Program Section)</p>	<p>1 = Never 2 = Infrequently 3 = Sometimes 4 = Frequently 5 = Always</p>	<i>IV<sub>3</sub></i>
<p><b>GPA Level</b> Undergraduate overall based on 4.0 scale.</p>	<p>6 (Demographic Information Section)</p>	<p>3.5 – 4.0 3.0 – 3.49 2.5 – 2.99 2.0 – 2.49 1.5 – 1.99 1.0 – 1.49 0.99 and below</p>	<i>IV<sub>4</sub></i>
<p>Parental Education Level Highest level of education completed by a parent.</p>	<p>4 (Demographic Information Section)</p>	<p>-At least one has a graduate degree -At least one graduated from college -At least one had some college -At least one graduated from high school -No parent completed high school</p>	<i>IV<sub>5</sub></i>

## APPENDIX H

## DEPENDENT VARIABLE TABLE

<b>Variable</b>	<b>Question(s)</b>	<b>Response Option</b>	<b>Code</b>
<b>Intent to Attain a Doctoral Degree</b>	4 - 13 (Educational Goals Section)	1 = Definitely Not 2 = Not Likely 3 = Maybe 4 = Probably Yes 5 = Definitely Yes	<i>DV<sub>1</sub></i>
<b>Awareness of Graduate School</b>	1 (Graduate School Section) <i>Note: Question is comprised of 21 items.</i>	1 = Not at all beneficial 2 3 = Neutral 4 5 = Extremely Beneficial	<i>DV<sub>2</sub></i>

APPENDIX I  
CONSENT TO USE PRINCIPLES OF ADULT MENTORING SCALE –  
POSTSECONDARY EDUCATION



Dwuenya Wyre <dwuenya.wyre@eagles.usm.edu>

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## Thanks & Follow-Up

Dr Norman Cohen <drnormancohen@comcast.net>  
To: Dwuenya Wyre <dwuenya.wyre@eagles.usm.edu>

Tue, Sep 14, 2010 at 3:07 PM

**Hi Dwuenya:**

**I hereby grant permission for you to use the Principles of Adult Mentoring Inventory in your doctoral dissertation research.**

**The topic of your research should be an important contribution to the literature on mentoring.**

**Please contact me if I can be of any additional assistance.**

**Regards,**

**Dr. Norman H. Cohen**

---

## APPENDIX J

## CONSENT TO USE FACULTY MENTORING SURVEY



Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

## Faculty Mentoring Survey - Request

Stephanie Abbey <SAbbey@scu.edu>

Fri, Sep 3, 2010 at 2:18 PM

To: Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

Dwena,

It is a pleasure to hear from you. From our phone conversation today, it sounds like you are doing an excellent dissertation on the McNair Scholars Program. As you and I know, there has been limited research on the mentoring aspect of this program so it is great to hear you are examining this further. I am sure the McNair program will find your research valuable.

You are welcome to use the faculty mentoring survey from my dissertation. I hope it is helpful in your research.

Regards,  
Stephanie

*Stephanie Carrera Abbey, Ph.D.  
Counseling and Psychological Services  
Cowell Center  
Santa Clara University  
Santa Clara, CA 95053  
(408) 554-4172 phone  
[SAbbey@scu.edu](mailto:SAbbey@scu.edu)*

## APPENDIX K

## REQUEST TO PARTICIPATE AND UNIVERSITY RESPONSES



Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

## McNair Program Research

Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

Tue, Aug 31, 2010 at 1:15 PM

To: Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

Bcc: Nancy.Campbell@ua.edu, jmc8984@louisiana.edu, PayneT@montevallo.edu, Susan.Bourland@usm.edu, dherefor@olemiss.edu, dcole@olemiss.edu

Dear McNair Program Coordinator:

Some time ago, I contacted you regarding my interest in the McNair Program. Thank you for responding to my inquiry on the McNair Program. Your response helped narrow my topic and chart the course for my research. My dissertation research focuses on the McNair Program's mentoring component to explore the faculty mentors' competency and the impact these competencies have on the students' (McNair scholars) perception of the program's success.

You indicated you would be willing to provide additional information on your university's program. If still interested, I would like for your McNair scholars to participate in my research by completing a survey, currently in development. Once completed, the survey will be given to current program participants who are paired with faculty mentors.

Please reply to this e-mail by **September 8, 2010**, if you are willing for your program to participate in this research. Once your participation is confirmed, you will receive information on the progress of this study and research results. Thanks again, and I hope you have a great fall semester ahead.

Dwuena Wyre  
Graduate Assistant  
Jack and Patti Phillips Workplace Learning and Performance Institute  
Department of Economic and Workforce Development  
The University of Southern Mississippi  
228.214.3493

**Campbell, Nancy <Nancy.Campbell@ua.edu>**  
To: Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

**Tue, Aug 31, 2010 at 3:04 PM**

Each of our McNair Scholars must decide for themselves whether to, indeed, participate, but as long as you have USM's IRB approval of the research, I will be happy to share this opportunity with our Scholars.

Best wishes with your research,

Nancy Campbell

Nancy Campbell, Ph.D.

Director, McNair Scholars Program

The University of Alabama

The Graduate School

Box 870337

Tuscaloosa, AL 35487-0337

(205) 348-0580

fax (205) 348-0447

[nancy.campbell@ua.edu](mailto:nancy.campbell@ua.edu)

<http://graduate.ua.edu/mcnair/>

**Payne, Tracy <PayneT@montevallo.edu>**  
To: Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

**Tue, Sep 7, 2010 at 2:44 PM**

Hi Dwuena,

I will be happy to participate.

My information is in my signature line.

Dr. Tracy H. Payne, Director  
McNair Scholars Program (TRIO)  
Undergraduate Research and Creative Endeavors  
University of Montevallo  
Station 6570 \* Montevallo, AL 35115  
(205) 665-6570 - office  
(205) 665-6566 - fax  
[www.montevallo.edu/mcnair](http://www.montevallo.edu/mcnair)  
[www.montevallo.edu/UndergradResearch](http://www.montevallo.edu/UndergradResearch)

UM Students are Preparing for the FUTURE  
Fostering Understanding Through Undergraduate Research Endeavors

[Quoted text hidden]



**Joseph M Cotton <jmc8984@louisiana.edu>**  
To: Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

**Wed, Sep 8, 2010 at 3:57 PM**

Ms. Wyre,

This correspondence will confirm the willingness of our Ronald E. McNair Program here at the University of Louisiana at Lafayette to participate in your study of the McNair mentoring process by providing whatever assistance we can, to include participants completing a survey regarding their personal experiences.

We offer our opportunities to our scholars to review, study and/or participate in as many research activities as they can partake in while in the program. I will make this opportunity available to them as well.

Whenever we can be of assistance to you in your research endeavor, please contact me.

Joseph M. Cotton, EdS, LPC

McNair Coordinator

University of Louisiana at Lafayette

(337) 482-6088

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**Demetria Hereford <dherefor@olemiss.edu>**  
To: Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

**Mon, Sep 13, 2010 at 1:04 PM**

Hi Dwuena. I will agree to forward this email to my scholars. Good luck!

[Quoted text hidden]

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**loria.c.brown <loria.c.brown@jsums.edu>**  
Reply-To: loria.c.brown@jsums.edu  
To: Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

**Tue, Sep 14, 2010 at 8:58 AM**

Yes, we will participate in your study. Dr. Brown.

[Quoted text hidden]

--

Loria Brown, Ph.D.  
Jackson State University  
Special Assistant to Assoc. Vice President  
PI/Director of Federal TRIO Programs  
601-979-4275

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**Susan Bourland** <Susan.Bourland@usm.edu>  
To: Dwuena Wyre <dwuena.wyre@eagles.usm.edu>

Thu, Sep 16, 2010 at 2:59 PM

Yes, we will.

SB

APPENDIX L  
PARTICIPATING MCNAIR PROGRAMS

State	University	Study Contact	Program Participants (U.S. Department of Education, 2010)
AL	University of Alabama – Tuscaloosa	Nancy Campbell, Ph.D., Director McNair Scholars Program Box 870304 Tuscaloosa, AL 35487 Phone: (205) 348-0580 Fax: (205) 348-0447 <a href="http://www.ctl.ua.edu/MSP">www.ctl.ua.edu/MSP</a>	25
AL	University of Montevallo	Tracy H. Payne, Ph.D., Director McNair Scholars Program (TRiO) and Undergraduate Research and Creative Endeavors University of Montevallo Station 6570 * Montevallo, AL 35115 Phone: (205) 665-6570 Fax: (205) 665-6566 <a href="http://www.montevallo.edu/mcnair">www.montevallo.edu/mcnair</a>	26
LA	University of LA – Lafayette	Joseph M. Cotton, Med, LPC McNair Scholars Research Program University of Louisiana at Lafayette P. O. Box 43452 Lafayette, LA 70504-3452 Phone: (337) 482-6208 Fax: (337) 482-5069 <a href="http://gs.louisiana.edu/mcnair/index.shtml">http://gs.louisiana.edu/mcnair/index.shtml</a>	30
MS	Jackson State University	Loria Brown, Ph.D., Director McNair Scholars Program P.O. box 17350 Jackson, MS 39217 Phone: 601-979-4275 Fax: 601-979-4342 <a href="http://www.jsums.edu/studentlife/trio_programs.html">http://www.jsums.edu/studentlife/trio_programs.html</a>	30
MS	University of Mississippi	Demetria Hereford, Assistant Director McNair Program University of Mississippi Vardaman 206 University, MS 38677 Phone: 662.915.1179 Fax: 662.915.3958 <a href="http://www.olemiss.edu/programs/McNair">www.olemiss.edu/programs/McNair</a>	28
MS	The University of Southern Mississippi	Susan Bourland, Ph.D., Director McNair Scholars Program The University of Southern Mississippi 118 College Drive #10022 Hattiesburg, MS 39406-0001 Phone: (601) 266-6910 Fax: (601) 266-6272 <a href="http://www.usm.edu/mcnairscholars/index.html">http://www.usm.edu/mcnairscholars/index.html</a>	25

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