A CASE STUDY ON THE IMPACT OF A MENTORSHIP PROGRAM ON LOW SOCIOECONOMIC STATUS STUDENTS AT A FOUR-YEAR URBAN UNIVERSITY

by

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Abstract

Mentorship is an essential component to undergraduate student success and may be the catalyst for contributing factors that increase retention rates and grade point averages (GPAs) among the low socio-economic student (SES) population. A university sponsored mentorship program specifically geared toward low SES students was examined to define and measure variables that have had an impact on student success. As of the beginning of the 2014-2015 academic year, the student mentees in the mentorship program have had a 90% retention rate. The purpose of this action research mixed methods case study was to identify those variables that have contributed to the success of 215 participating low SES students in the mentorship program. Retention rates and GPAs were compared between the student mentees and their non-mentored counterparts at the university. Supported by an explanatory sequential mixed methods design, surveys and one-on-one interviews collected qualitative data to further triangulate the hypothesis that low SES students who are mentored are more successful in college than their non-mentored counterparts.

Keywords: mentoring, retention, persistence, student success

The Dissertation Committee for Drexel University

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A CASE STUDY ON THE IMPACT OF A MENTORSHIP PROGRAM ON LOW SOCIOECONOMIC STATUS STUDENTS AT A FOUR-YEAR URBAN UNIVERSITY

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Dedication Page

I would like to dedicate this research and dissertation to several people who have provided me the inspiration, support, and motivation to keep moving and achieve a life-long dream of earning a doctoral degree as a first-year generation student. First, I want to thank my wife, Kalen Cooke, who continued to love and support me through this process and accept my absences while working on my degree. There were many challenges in pushing through this journey, but you were there for me to celebrate my victories, support me in my defeats, and coach me to continue pursuing through to achieve my tasks and goals. Second, I thank my two sons Patrick M. Cooke and Connor J. Cooke, my inspirations who have no idea how many sacrifices they endured when I missed practices, games, vacations, and other events because I physically was unable to attend or mentally was not present. It is my hope that someday you will realize how much I appreciate the opportunity and obligation to not just serve as your father, but as a mentor as well who I hope to ultimately inspire you to do the same one day for others.

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Chapter 1: Introduction

Introduction to the Problem

The value of a higher education is more important now than ever before to allow individuals "self sufficiency and social mobility" in society (Sokatch, 2006, p. 128). According to the U.S. Census Bureau (2009, 2012), those who have a college degree are more likely to have a higher income than those who have no college education (Bauman, 2012). Between the years 2000-2013, the unemployment rate was higher for those who had just a high school diploma compared to individuals who had a bachelor's degree (U.S. Department of Labor, 2014). For example, in 2013, for young adults ages 20-24, the unemployment rate was 17.5% for those who just had a high school diploma compared to a 7.0% unemployment rate for individuals who had at least a bachelor's degree (U.S. Department of Labor, 2014). Although college enrollments have grown over the last 20 years for 18-24 year olds, college admissions continue to be lower for students who fall into the lower family income quartile compared to students who are in the higher family income quartile (Perna, 2006).

Many low socioeconomic students (SES) have been sought by many universities of American higher education because of the diversity they bring to a student body. The low SES students, however, are more susceptible to drop out of college because of the lack of resources and support needed for the population to be successful (Hoxby & Avery, 2013; Swail, Redd, & Perna, 2003; White House, 2014). College access has not been the only challenge for the students who fall into the lower family income quartile as funders and policymakers have been more concerned about completion rates of all college students (Jenkins & Weiss, 2011). In 2009, the Lumina Foundation for Education set a goal that 60% of all Americans would receive a college degree, certification, or other credential past high school by the year 2025 (Lumina

Foundation for Education, 2013). Additionally, in 2008, the Bill and Melinda Gates Foundation funded the Postsecondary Success Initiative, an effort to double the completion rates of low-income college students (Bill and Melinda Gates Foundation, 2014). Retention of the low SES students continues to be a challenge for many higher education universities.

Statement of the Problem to Research

The sub-population of low SES students has historically had lower retention rates than students who do not fall into the low SES category at higher education universities. The absence of retaining students from low SES backgrounds does not only have an effect on the individual's capacity for financial earnings and a better life but also presents the potential loss of skills and knowledge that may affect the U.S. economy and society as a whole (Crosling, Heagney, & Thomas, 2009). In order to retain students from low SES backgrounds affording them the opportunity to develop the skills, knowledge, and experiences by obtaining a college degree; it is essential that colleges and universities develop effective strategies to retain this sub-population of students. Mentorship is an essential component to student success and may be the catalyst for other contributing factors that increase retention among the low SES student population in higher education.

Purpose and Significance of the Problem

The purpose of this action research study was to understand the impact of a mentorship program on low SES students at a four-year urban university. The sub-population of low SES students has historically had lower retention rates than higher SES students at colleges and universities, including the university being studied. Mentorship is an essential component of the program being researched and the mentoring relationship may be the catalyst for contributing factors that increase retention among the low SES students at the university being studied.

The implementation of a mentor program at a university is a way to address and support the retention rate of college students. Mentoring in higher education has become an important priority at many universities to assist first year students' transition to college, enable social integration to the collegiate environment, and increase academic performance (Crisp & Cruz, 2009; Terrell, Hassell, & Duggar, 1992). Tinto (1993) found that students who successfully became more academically and socially integrated into the university environment were more likely to retain through freshman and sophomore year and even through graduation. In addition, through the analysis of mentoring research in higher education, Jacobi (1991) concluded that mentoring in the university setting may improve students' academic success by increasing grade point average (GPA) and assisting students with adjusting to the larger university community. Both examples of academic and non-academic activities may lead to student success, retention, and persistence (Lotkowski, Robbins, & Noeth, 2004).

Crisp and Cruz (2009) concluded that there is a variety of definitions for mentoring found throughout the literature and there is no one widely accepted definition. Mentors in higher education can be faculty (Campbell & Campbell, 1997; Endo & Harpel, 1982; Kuh & Hu, 2001; Pascerella & Terenzeni, 1980), staff members (Dugan & Komives, 2010), student peers (Wood, 1997), and even alumni (Ross-Thomas & Bryant, 1994). The purpose of a mentor in higher education is to develop a relationship over time with a less experienced individual who is not accustomed to the environment and culture of the university setting while providing emotional and influential support through role modeling, assisting in goal setting and future planning, and nurturing social, career, and personal development (Cohen & Willis, 1985; Crisp & Cruz, 2009; Grossman & Rhodes, 2003; Institute for Higher Education Policy, 2011; Jacobi, 1991; Kram, 1985; Miller, 2002; Roberts, 2000).

One specific population of students that universities and colleges focus their retention efforts on is the first year high achieving students that are categorized as low income or low SES students. Low SES students have been sought by many universities because of the socioeconomic diversity they bring to a student body, however, these students are more likely to drop out of college because of the lack of resources and support needed to be successful (Hoxby & Avery, 2013; Swail, Redd, & Perna, 2003; White House, 2014). Many universities have developed specific mentoring programs to recruit and retain first year low SES students. The literature has presented many benefits to student-staff mentoring relationships in higher education for all student populations, but particular emphasis on the low SES student population can have even greater effects. Since the low SES students are more likely to be a first generation student who comes from a single parent household who may be less engaged in the student's success, it may be necessary to provide mentoring opportunities for these students to be successful at a college or university (Hoxby & Avery, 2013; Swail, Redd, & Perna, 2003).

In their study, Ashitani and Feliciano (2012) found that college completion rates were higher for low SES students who reported having a mentor than those low SES students who did not have a mentor. Mentorship in higher education can lead to higher GPAs (Bordes & Arredondo, 2005; Campbell & Campbell, 1997; Crisp, 2010; Ross-Thomas & Bryant, 1994; Wallace, Abel, & Ropers-Huilman, 2000) and higher levels of social integration and skills development (Bernier, Larose & Soucy, 2005; Chickering & Reisser, 1993; Dugan & Komives, 2010; Nora & Crisp, 2008; Zalaquett & Lopez, 2006). Studies have shown that higher GPAs and increased social integration can therefore lead to higher retention rates, greater persistence, and overall student satisfaction; thereby enabling the low SES student population to stay in college, obtain a college degree and be successful (Jacobi, 1991; Lotkowski et al., 2004; Tinto, 1993).

Earning a college degree has never been greater in the United States as it leads to greater prospects of employment leading to higher earnings than those citizens who do not have a college degree which benefits the United States economy overall (White House, 2014; United States Department of Labor, 2013). A structured mentorship program could be the answer.

In 2010, the university being studied established a semi-structured mentorship program offering 50 incoming first year students per year a renewable scholarship award that covers 100% of the students' fees and tuition. Qualifying students must live in the city of Philadelphia and have recently graduated from a Philadelphia city high school; qualify as low income as determined by the Free Application for Federal Student Aid (FAFSA) and tax/financial documentation; and be classified as high achieving students as determined by their capability to meet the admission criteria to the university.

This mentorship program is being classified as semi-structured by the researcher because the requirements of the program are minimal. Student mentees are only required to meet with their staff or faculty mentor once a term and there is no guiding document or set standards for those meetings. Each student in the mentorship program is randomly assigned a full-time staff or faculty mentor. As of the start of the 2014-2015 academic year, the mentorship program had an impressive 90% retention rate with 215 full-time undergraduate students enrolled.

Similar to many colleges and universities across the United States, retention is an important strategic initiative at the university being studied. In May of 2013, the university president addressed the university community and set a goal to increase the student retention rate from 60% to 80% (Petri, 2013). With the success of retention efforts through the mentoring program at this university, there may be best practices that can be adopted to increase the retention of all low SES students, including those not enrolled in the mentorship program at the

university. To better understand the positive effects of the mentorship program and adopt those best practices in efforts to increase retention, the proposed study investigated the effect of mentorship variables on low SES students' retention and suggested best practices for further research.

Although mentorship programs have been linked to increasing retention at many universities and colleges, there have not been many studies that have focused on *why* that is the case. Low SES students also may not have had the resources in their high schools, such as guidance counselors, who would assist theses students in getting ready for college. High schools that serve a majority of low SES students have student to high school guidance counselor ratios of 1000 to one compared to the national average of 470 per student (Haskins, Holzer, & Lerman, 2009). Once best practices have emerged from this study, certain aspects can be adopted in further studies that may assist the positive effects of mentorship on retention of other sub-populations of students.

In addition, much of the research on mentorship programs is quantitative in nature and does not collect and analyze qualitative data (Crisp & Cruz, 2009). A qualitative study can emerge a deeper meaning and understanding of *why* mentorship contributes to higher student retention rates and persistence (Creswell, 2012). By asking specific questions to the student mentees the researcher will gain a deeper understanding of why students who participate in the mentorship program are more successful than other sub-populations of students who are not involved in the mentorship program. Ultimately, it is the intent of the researcher to demonstrate that mentoring contributes to college student retention and success for low SES students.

Research Questions

This explanatory sequential design mixed methods case study was to examine an urban four-year private university's semi-structured mentorship program's impact on student success for participating low SES student mentees. The primary question of the study was as follows: What is the impact of the mentorship program on the low SES student mentees at a four year urban university?

The secondary research sub-questions guided this study:

1. How do the retention rates and GPAs differ from those low SES students participating in the mentorship program compared to those low SES students who do not participate in the mentorship program?
2. How does the frequency of the interactions between the mentor and mentee impact the GPAs, retention rates, and social engagement of the participating low SES students?
3. What are the primary factors of the mentoring relationship that impact the participating low SES student's success at the university?

The Conceptual Framework

Researchers Stance and Experiential Base

The researcher was an employee and community member of the university where the study took place and was aware of the importance of retention at the university. The president of the university has made student retention at the university a priority. The researcher has had the opportunity to serve on several committees formed by a consulting company that is examining the way students are recruited, awarded scholarships and financial aid, oriented, and advised. Through the researcher's observations and discussions in these committees the researcher has seen first-hand the significance of retention on how the university functions as a university and

as a business entity. If students are not retained, it can negatively affect the ranking as well as the financial health of the university and be a disservice to low SES students.

Besides being an employee of the university where the study took place, the researcher also served as a mentor in the program being researched. As a staff mentor to a student in the program, the researcher has observed the positive effects the mentoring program has had on the student mentees. The researcher has served as a volunteer staff mentor in the program since its inception in 2010 through 2015. Since then, the researcher has mentored two student mentees and has seen how they have maintained higher GPAs, had higher levels of social integration into the university setting, and been retained.

The researcher believed that the incorporation of theory to practice may generate hypotheses that certain theories may further explain the variables associated with a mentorship model that can lead to college student success of low SES students. It is important to explore these factors deeply to observe what specifically these variables are and develop best practices from the research because of the importance of retention in the university setting. This study was an action based mixed methods research case study therefore the philosophical approach is pragmatic, believing that reality's issues are solved through multi-means in finding the best possible solution to the issue.

Conceptual Framework

There were three streams of research to the research study. These included characteristics of a successful mentor-mentee relationship, the factors related to college student success, and mentorship and student success. This study examined the effect of the development of these variables through a mentorship relationship and its effects on student success.

Definition of Terms

Provided below is a *short* list of terms used throughout the research

Attrition-Attrition is the opposite of retention and is the action of dropping out of an university.

FAFSA- FAFSA is an abbreviation for Free Application for Federal Student Aid, which is a form that is completed annually to determine a student's eligibility for student financial aid.

GPAs- GPAs is an abbreviation for grade point average which is the average of a student's grades for a particular amount of time.

High achieving- A high achieving student is defined in this study as being able to have met all the admission requirement to the university being researched and have the ability to maintain a 2.75 term GPA.

Low-SES- Low socioeconomic status (SES) students. The University quantifies a students as low SES based on the student's FAFSA application.

SES-An abbreviation for socioeconomic status based on the student's family's income, educational level, and occupation.

Assumptions, Limitations and Delimitations

There were two main assumptions related to this research that should be considered. The mentorship program at the university has been funded through the 2015-2016 academic year. The primary assumption of the researcher was that the university will continue to find the financial resources and/or donor(s) to help support the mentorship program past this academic year. If no funding is secured, it can be difficult to continue offering 50 full paid scholarships to

incoming students through the duration of their academic career at the university making the program irrelevant, but can still demonstrate the need for mentorship programs.

Another assumption related to this research was that the student mentee met regularly with their assigned mentor. The only requirement of the mentorship program was that every student mentee met with their assigned mentor at least once an academic term. There currently is no prescribed agenda for these meetings. It was an assumption of the researcher that the student mentees do indeed meet with their staff or faculty mentor and fulfill the once a term meeting requirement.

There are also a few limitations that needed to be considered as it related to this research. First, at the time this research was conducted there were currently 215 student mentees enrolled in the mentorship program which limited the amount of participants when it came to collecting data through questionnaires. In order to address this, the researcher worked with the mentorship program director to strategize an effective and efficient way to encourage participation. In addition, another limitation was that mentors may have changed for the student mentees over time because of staff or faculty mentor attrition. The researcher needed to be cognizant and ask specifically through the research that if a student mentee has been with their assigned mentor since they began the program.

One delimitation as it related to this research has been identified. This research was conducted at one university. If time and resources were available this study would have been done at other universities that have similar mentorship programs. Because there was limited time constraints and lack of resources, this study was limited to one university.

Summary

In this chapter, the researcher has provided an overview of the impact of mentorship on college students. Retention is an important element at any university of higher education and specifically at the university being researched. In addition to providing a student with consistency in meeting their own individual academic goals, retention also allows the university the ability to maintain consistency with its enrollment which ultimately contributes to the financial health of the university. Many of these universities seek to have a diverse student population, specifically recruiting students from the low SES student population. Historically though, colleges and universities have struggled to retain the low SES students. Mentorship is a catalyst for college student success and was the desire of the researcher to further examine why the mentorship program being studied has been successful in retaining 90% of the students at the university since the inception of the program five years ago. Through further analysis of the quantitative data (GPAs and retention rates) and conducting qualitative research through questionnaires and one-on-one interviews, it was the hope of the researcher to further explain and define the variables of the mentorship program's success, identify best practices, and promote the adoption of applications across the university and within the field of higher education.

Chapter 2: The Literature Review

Introduction

Mentorship is an essential component of the retention of low SES students in higher education. The sub-population of low SES students has historically had lower retention rates than those students who do not fall into the low SES. Mentoring in higher education has become an important priority at many institutions to assist first year students' transition to college, enable social integration to the collegiate environment, and increase academic performance (Crisp & Cruz, 2009; Terrell, Hassell, & Duggar, 1992). Tinto (1993) found that students who successfully became more academically and socially integrated into the university environment were more likely to retain through freshman and sophomore year and even through graduation. In addition, through the analysis of mentoring research in higher education, Jacobi (1991) concluded that mentoring in the university setting can improve students' academic success by increasing grade point average (GPA) and assisting students with adjusting to the larger university community through engagement. Both examples of academic and non-academic activities can lead to student success, retention, and persistence (Lotkowski, Robbins, & Noeth, 2004).

In 2010, the university in this study instituted a mentorship program for low SES students. The university provides 50 full paid scholarships to students who qualify as low SES as determined by their FAFSA and family tax documentation. In addition, the recipients must live in the city of Philadelphia, have attended high school in Philadelphia, and meet the admission requirement for the university. Each student is assigned a faculty or professional staff member mentor. As of the start of the 2013-2014 academic year, the mentorship program had an impressive 90% retention rate with 215 full-time undergraduate students enrolled.

This study focuses around the following three streams:

- The characteristics of a successful mentor-mentee relationship
- Factors related to college student success
- Mentorship and student success

Characteristics of a Successful Mentor-Mentee Relationship

There are many elements that can create a successful mentor-mentee relationship. One of the most important elements is defining the terms mentor and mentee. In 2009, Crisp and Cruz found in their research of over 50 studies that there is no clear definition of the mentoring relationship. In addition, there are many types of mentoring relationships that exist. The two major types of mentoring relationships found in the literature are formal and informal (Campbell & Campbell, 1997, 2007; Hu & Ma, 2010; Pascarella & Terenzini, 1980; Salintri, 2005; Wallace, Abel, & Ropers-Huilman, 2000). Chao, Walz and Gardner (1992) found that each type of mentorship may have an effect on the success of the mentoring relationship. A third element of a successful mentoring relationship is how often the mentor and mentee interact. Frequency of meetings is a factor that may make a mentoring relationship more successful (Gershenfeld, 2014). Following is an examination of each element of a successful mentoring relationship supported by the literature reviewed.

Defining mentorship.

The etymology of the term "mentor" dates as far back as the Stone Age (Dickey, 1996). The name Mentor is of a character in Homer's *Odyssey* who serves as Odysseus' entrusted friend who helps him prepare for a battle in the Trojan War (Miller, 2002). As a "wise and responsible individual", the character Mentor serves as an "advisor" to Odysseus and "guides" him in his personal development in preparation for war (Crisp & Cruz, 2009, p. 527).

The word “mentor” is synonymous with many other terms commonly used in education and psychology. Research has provided a breadth of definitions adding much complexity to one standard meaning of the term in the field (Jacobi, 1991; Gershenfeld, 2014). The notion of mentor has been described as both a persona and as a process. As an individual, Blackwell (1989) compared “mentor” (p. 9) to instructor, counselor, guide and facilitator of intellectual development. Shandley (1989) describes a mentor as an individual whom “fosters the development and growth” (p. 60) of another individual. Furthermore, Schmidt and Wolfe (1980) state that the mentor acts as a “role model, a consultant/advisor, and a sponsor” (p. 45). Levinson, Carrow, Klein, Levinson and McKee (1978) went on further to position that the term “mentor” is used in a “much narrower sense…it means all these things, and more” (p. 97-98) demonstrating how cumbersome it truly is to agree on one true definition of a mentor (Jacobi, 1991).

As a process, “mentoring” has been described as a “function of educational institutions” (Lester & Johnson, 1981, p. 119) that is “intentional”, “insightful” and “nurturing” (Shandley, 1989, p. 60) to an individual ideally facilitated by a professor or faculty member (Moses, 1989). The intent of the process is for a one-on-one relationship to develop over time where a more experienced, knowledgeable, wiser individual shares advice, counsel, and insight with a younger individual (Jacobi, 1991). Kram (1983, 1985) has proposed that there is a four phase model of the mentorship process that a mentor and the individual being mentored traverse: initiation, cultivation, separation, and redefinition.

Through the analysis of 52 empirical studies and essays on mentorship in higher education, Crisp and Cruz (2009) concluded that there is a variety of definitions for mentoring found throughout the literature and there is no one widely accepted meaning as well. In their

study, however, there were characteristics of these definitions that reflected certain elements of a successful mentoring relationship. For example, some studies defined the term "mentoring" as a one-on-one relationship between a more-experienced individual and a less-experienced individual (Brown, Davis, & McClendon, 1999; Garvey & Alred, 2003; Murray, 2001); a process involving emotional support and instrumental functions of wellbeing (Jacobi, 1991; Kram, 1983); and a relationship that grows between individuals over time (Grossman & Rhodes, 2002).

In a one-on-one partnership, there are certain characteristics necessary of the more-experienced individual when serving as a mentor to a less experienced individual (Brown, Davis, & McClendon, 1999; Garvey & Alred, 2003; Murray, 2001). Several of the traits needed by the more experienced individual include being open minded, having relevant experiences to necessitate the partnership, a desire and willingness to assist the less-experienced individual, and an ability to acutely "listen, challenge and support" (Garvey & Alred, 2003, p. 4). The researchers also found that the less-experienced individual must have a commitment to their own development and growth as a learner, be open and honest, and as well have trust in the more experienced individual who is serving as the mentor (Garvey & Alred, 2003).

Jacobi's (1991) review of the mentor research found three consistent elements of the definition that are central to the instrumental and emotional growth of the mentored individual that were reinforced in later literature (Crisp & Cruz, 2009). The mentoring relationship is supportive to the professional and career development of the mentored individual (Brown, et al, 2005; Campbell & Campbell, 1997; Kram, 1985); to nurture psychological support of the individual being mentored (Cohen & Wills, 1985; Miller, 2002; Roberts, 2000); and to role model positive behavior (Blackwell, 1989; Brown, et al, 2005).

Grossman and Rhodes (2002) found in their research that those individuals who continued a relationship with their mentor that lasted a year or longer had reported greater academic success and improvements in psychosocial and behavioral outcomes than those who ceased the relationship with their mentor within six months. As a student transitions through their college career; developmental needs will change as well and guidance, counsel, and support from the mentor will most likely have to accommodate.

The role of a mentor in higher education is typically a faculty member; however it is important to note that non-faculty members serve in this role as well (Crisp & Cruz, 2009). Studies have shown that peers (Wood, 1997), professional staff (Dugan & Komives, 2010), and alumni have served in the role as mentors in higher education (Ross-Thomas & Bryant, 1994) The individual being mentored is typically called a mentee but sometimes has been referred to as a "protégé" (Campbell & Campbell, 1997; Lankau & Scandura, 2002; Haring, 1999; Sosik & Godshalk, 2000).

For the purpose of this research, the function of a mentor in higher education is to develop a relationship over time with a less experienced individual who is not accustomed to the environment and culture of the university setting while providing emotional and influential support through role modeling, assisting in goal setting and future planning, and nurturing social, career, and personal development (Cohen & Willis, 1985; Crisp & Cruz, 2009; Grossman & Rhodes, 2003; Institute for Higher Education Policy, 2011; Jacobi, 1991; Kram, 1985; Miller, 2002; Roberts, 2000). The individual being mentored is referred to as a mentee in this study.

Two Major Types of Mentoring.

Two major types of mentoring relationships in higher education have been identified in the literature. Formal mentoring is considered to be a structured format of mentorship where

there is an expectation of the mentor and mentee to meet and discuss specific outcomes (Campbell & Campbell, 1997; Crisp & Cruz, 2009;). Typically, the formal mentorship relationship is facilitated by a third party. Informal mentoring is a less structured form of mentorship and there are no expectations set in place. Informal mentoring relationships can form "naturally" (Crisp & Cruz, 2009, p. 529) between the mentor and mentee (or protégé). Both formal and informal mentorship have been credited to the retention and persistence of students (Campbell & Campbell, 1997, 2007; Hu & Ma, 2010; Pascarella & Terenzini, 1980; Salintri, 2005;). Wallace, Abel, & Ropers-Huilman, 2000).

Informal Mentoring.

Informal mentoring relationships can be initiated by the mentee or mentor. These relationships form naturally and are not facilitated by any office or program (Crisp & Cruz, 2009). Mentees seek out a staff or faculty member on their own and that "mentor" may serve as a role model or coach to the mentee in assisting them to meet the student mentee's professional and personal goals (Raggins, Cotton, & Miller, 1999). Faculty members typically serve in the role of mentors to student mentees in higher education, but there have been cases that professional staff (Campbell, Smith, Dugan & Komives, 2012), peers (Woodd, 1997) and even alumni (Ross-Thomas & Bryant, 1994) have served in this role. Informal mentoring relationships can be just as effective as formal mentoring relationships.

Kuh and Hu (2001) conducted an examination of research done in the 1990s on informal faculty interactions and its effects on student learning and personal development. In their study, they found that the most frequent type of interactions that took place between faculty and students was informal (Kuh & Hu, 2001). Meeting a professor after class, visiting during office

hours, attending an academic event or having lunch with a faculty member to discuss research interests are all considered informal mentoring activities.

In their longitudinal study, Pascarella and Terenzini (1980) found that informal relationships between faculty and students can have a positive impact on student success as well. Through their research, they were able to conclude through the analysis of the data that those students who met more frequently with faculty members informally yielded higher GPAs then other students and the relationship had positive effects on academic and intellectual development. This research supported previous work done by Pascarella and Terenzini (1976) where evidence supported that the frequency of informal contact between faculty and student led to higher GPAs and student persistence.

Komarraju, Musulkin, and Bhattacharya (2010) further found first-year students that had positive interactions with faculty members informally were more likely to enjoy the learning process at the institution and were motivated to do better than those students who did not have those interactions. Specifically, the study identified academic self-concept, motivation, and self-confidence as being higher for those students who identified having positive interactions with faculty compared to the results of those students who did not have such interactions. In addition, those students who had interactions with the faculty had higher GPAs than those who did not (Komarraju, Musulkin, & Bhattacharya, 2010).

To further support the research, Crisp (2010) found through an analysis of the data presented through a study conducted that the mentoring experience had had a positive impact on students' academic and social integration at the institution. Crisp (2010) surveyed students at a community college who had a mix of formal and informal relationships with their mentors. This research supported the fact that informal interactions between student mentees and mentors are

not just effective with traditional first year students but also with non-traditional students in community colleges.

Formal Mentoring.

Formal mentoring is more structured than informal mentoring relationships. In formal mentoring programs, student mentees are assigned or paired with a staff or faculty member. Typically, formal mentoring programs in higher education are developed to facilitate a student's transition to the university setting and "help improve levels of student involvement, motivation, and academic self-confidence and, in turn, increase levels of institutional commitment and engagement" (Lotkowski, Robbins & Noeth, 2004, p. 15). Sometimes these formal mentoring relationships may not be beneficial because of lack of commitment or clash of personality between mentee and mentor (Kram, 1985; Lee & Bush, 2003)

A case study conducted by Ross-Thomas and Bryant (1994) developed two unique formal models of mentorship at a historically black college (HBCU). The first model used staff and faculty to mentor first year "underprepared high risk" (p. 71) students through a formalized process to increase retention rates, which were previously low. The second model utilized the college's alumni to mentor second year students who were placed on academic probation to increase the students' GPA and promote academic success. Through the formalized mentoring program, there was a 15% increase in the first year student retention that were classified as high risk and a 5% increase in the mean cumulative grade point average of the second year students who were mentored (Ross-Thomas & Bryant, 1994). In addition, there was a 15% decrease in the probation rate of first year students enrolled in the mentorship program (Ross-Thomas & Bryant, 1994).

Frequency of Meeting with Mentor.

In both formal and informal mentoring relationships, the frequency of the interactions tends to be a variable that may impact the outcomes of the relationship the most (Gershenfeld, 2014). Although none of the studies reviewed specifically researched the effectiveness of the frequency of the interactions, some of the studies demonstrated that the more often the mentee and mentor met, the more likely the student mentee was successful in achieving certain positive outcomes of the mentorship relationship (Bordes & Arredondo, 2005; Campbell & Campbell, 1997; Endo & Harple, 1982; Kuh & Hu, 2001; Pascarella & Terrenzinin, 1976).

According to the described definitions of formal and informal mentorship, the program being researched in this study can be considered a combination of both types of mentorship. The student mentees are assigned a volunteer staff or faculty mentor, formalizing the mentoring relationship. The mentors in the program being researched, however, are not mandated to serve in the capacity as a mentor as a part of their professional position. The only expectation of the program being researched is that the mentor and student mentee is to meet once a term. However, some mentors and mentees meet more frequently than others. This study seeks to find if the frequency of the meetings is a factor of a successful mentor-mentee relationship.

Factors Leading to College Student Success

There are several factors that contribute to student success at colleges and universities that have been identified in the literature over the last 40 years (Demetriou & Schmitz-Sciborski, 2011). Although there are a variety of factors that can contribute to student success, three have been identified for this research: academic preparation and engagement; social integration through co-curricular involvement; and student demographics. Each of these has been cited in

the research as indirectly or directly affecting student success and the ability for that student to graduate from a college or university (Demetriou & Schmitz-Sciborski, 2011).

Tinto's (1975, 1987, 1993) theory of student departure is one of the most cited and referenced models on college student success and retention (Pascarella and Terenzini, 2005). Through the adaptation of Durkheim's (1951) theory on suicide and Spady's (1971) research on the interaction between student characteristics and the campus environment; Tinto (1975) developed a model based on students' predispositions and characteristics before entering college and their commitment to educational goals at the college or university (Baird, 1996). Tinto (1975) hypothesized that the more academically and socially engaged a student is at their college or university, the more committed the student will be to their own success. For over 35 years, Tinto (1975) has added and revised his model of student success based on the individual student's "attributes, skills, commitment, intentions, and interaction with members of the college" effects on student success (Morrison & Silverman, 2012, p. 71).

Tinto (1993) proposed that students go through three stages of integration: (1) separation from past communities, (2) transition between communities, and (3) incorporation into the new community. Each student's experience is unique as they go through each stage. In addition, both external and internal factors can affect the student's ability to successfully reach the third stage. According to Tinto (1993) it is also important that there is congruence between the student's goals and the institution's commitments in order for the student to be successful as they traverse each stage.

In the first stage of Tinto's (1993) model, students are required to "mentally" disassociate themselves from communities, habits, and affiliations of the past (Morrison & Silverman, 2012, p. 71). These communities may include high school friends and family from

home. Although not permanently leaving family and friends from home behind, in this phase students start to identify with competing values and affiliations they had previously thought only existed with their past communities. If students are not able to "mentally" remove themselves from these communities of their past while on the college campus, it may inhibit the student's ability to move to stage two.

The second stage of the Tinto's (1993) model is the transition from the past communities (high school friends and family from home) into the new communities (the college or university). In this stage students integrate themselves to the institution by developing new peer networks while exposing themselves to unique academic experiences and new values in the college environment. In this stage, students will also acquire behavioral norms appropriate to the college environment (Tinto, 1993). Students will start to engage socially and academically with peers, faculty, and staff at the college who have created a set of shared values associated with the university.

The third stage of Tinto's (1993) model is the student's integration into the college community. In this stage, students integrate and incorporate new behaviors and interactions with members of the college in an effort to gain full membership to that community (Tinto, 1993). Academic issues, failure to connect socially and intellectually with the college environment and a low commitment on behalf of the college or university can lead to student isolation and ultimately departure from the university (Tinto, 1993).

Tinto's (1975, 1993) research laid the foundation for many more studies to be conducted on student retention (Berger & Lyon, 2005). Academic engagement and social integration, however, have remained as the two important factors to student success. Following is a further

examination of how students can successfully become more academically and socially engaged with their college or university in promoting their success as a student.

Academic preparation and academic engagement.

As Tinto (1975, 1993) pointed out, one of the important factors related to student success is the student's ability to academically be integrated into the college or university environment. Students' "precollege experiences" is an important factor of a student's success at a college or university (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006, p. 7). A student's K-12 academic preparation, family SES status and educational background, and financial aid are all important factors that contribute to the "precollege experience" (Kuh, et.al. 2006, p. 7). A student's academic preparation prior to entering higher education is an important indicator of that student's ability to succeed at that college or university (Bean, 1980). Swail (2004) found that many students who enter college are underprepared. According to the National Center for Educational Statistics (2012), 38% of students in colleges had to take at least one remedial course in writing, reading, or math at a four year institution (White House, 2014). When students are not academically prepared, they may not be properly integrated into the college community and may depart the university or college.

Once students are taking classes, grade performance becomes one of the greatest predictors of persistence, degree completion, and student success at a college or university (Pascarella & Terenzini, 2005). Typically, grade performance is measured by a student's grade point average (GPA). A theoretical framework that can support the importance of GPA as it relates to retaining students in higher education is Bean's student attrition model (1980, 1983) which ascertains that students need to succeed academically to be successful at the university.

Bean's student attrition model (1980, 1983) was adapted from a paradigm of Price's (1977) theory of working organization turnover. Bean (1980, 1983) suggested that the same reasons why students leave college were similar to why employees left their place of employment. Bean's (1980, 1983) student attrition model had four categories of environmental variables that explained why students left their university (Morrison & Silverman, 2012). One of the important components of Bean's (1980, 1983) research as it relates to this study was that student academic achievement, measured by GPA, is a significant component of student satisfaction and a factor to that student being retained at the college or university (Bean, 1980).

Bean and Eaton (2000) built upon Bean's (1980, 1983) earlier work and related it to the college student's self-efficacy and its effects on the student success at the university. Self-efficacy refers to an "individuals beliefs concerning whether or not he or she can perform a course of action resulting in a desired outcome" (Bandura 1977, as cited in Demetriou & Schmitz-Sciborski, 2011, p. 9). Bean and Eaton (2000) research suggests that when a student is competent in oneself and becomes efficient through their academics, the students will be successful in meeting their academic and social goals and therefore be successful at their college or university.

Social engagement through co-curricular involvement.

Astin (1999) describes student involvement as "the quantity and quality of the physical and psychological energy that students invest in the college experience" (p. 518). Astin's student involvement theory (1984) built upon the notion that student retention is attributed to their involvement and engagement in both curricular and co-curricular activities based on the "decisions the students make" and "the behaviors in which they engage" (Chatriand, 2012, p. 17). If students simply go to class and are not involved in other aspects of the campus

community, they are more likely to depart the college or university. Astin's (1984) theory had five basic "postulates" that accompany the theory as it relates to student involvement (Astin, 1999, p. 518). The basis of the theory is that the more involved a student is in their academic and personal development, the more likely they are going to be retained (Astin, 1984, 1999).

Participation in co-curricular activities is one factor that has supported Astin's (1984, 1999) research. According to Pascarella and Terenzini (2005), involvement in co-curricular activities may affect student's success by (1) facilitating the ability for students to psychologically and socially make new connections in the community that has similar achievement goals and (2) engage students in activities that enable them to develop competencies and skills enabling them to succeed (as cited in Kuh, et. al, 2006). Involvement in athletics, a student organization, membership in a fraternity or sorority, or participation in a leadership series have all been related to demonstrating higher levels of student satisfaction and student success (Kuh, et. al, 2006).

Student Demographics.

Another important factor related to student success is a student's demographic profile. First generation student, parent's education, family's SES, gender, ethnicity, the college's distance from home, religion, and cultural background are just some of the factors that contribute to a student's demographic profile and are relevant to the student's ability to succeed at a college or university. According to Thayer (2000), first generation students and students who come from a low SES background are least likely to graduate from a college or university. Furthermore, Choy, Horn, Nunez, and Chen (2001) found that first generation students are twice as likely to drop out of college after their first year since their parents do not have the experience and knowledge of navigating a college environment and culture.

First generation students often come from a low-SES background coming from school districts that were under-resourced (Demetriou & Schmitz-Sciborski, 2011). Sometimes the students from low-SES backgrounds come to university campuses underprepared for the rigor and pace of the college classroom making it difficult for them to succeed. According to the National Center for Education Statistics (2012), one in three students from low SES backgrounds are taking remedial courses compared to one in five from higher SES backgrounds. In order for low SES students to be retained, institutions need to make a commitment in supporting their success.

Low SES students may also face challenges when coming to college. Many of these students' parents lack any postsecondary education. Most students who are classified as low SES (with a mean income of $45,000 or less) are first generation students (Engle, Bermeo, & O'Brien, 2006). According to Baum and Payea (2004), first generation students face many challenges when they come to college because they lack the appropriate parental knowledge and experience needed to navigate a college culture and environment. Parents who did not have the college experience may have less family and social support to succeed at college, less refined skills to manage time appropriately, and less knowledge and experience on navigating the bureaucratic university policies and procedures (Kuh, et. al., 2006). When student face these challenges, they make not assimilate appropriately and depart the university before traversing the first stage of integration (Tinto, 1993).

Mentorship and Student Success

The function of a mentor in higher education is to develop a relationship over time with a less experienced individual who is not accustomed to the environment and culture of the university setting while providing emotional and influential support through role modeling,

assisting in goal setting and future planning, and nurturing social, career, and personal development (Cohen & Willis, 1985; Crisp & Cruz, 2009; Grossman & Rhodes, 2003; Institute for Higher Education Policy, 2011; Jacobi, 1991; Kram, 1985; Miller, 2002; Roberts, 2000). A faculty or professional staff member can serve in the role of a mentor to a student at a college or university. Mentors play many roles in higher education, but one of the most compelling reasons for a mentor in higher education is to academically engage and socially integrate their student mentees into the college or university environment. Mentors can assist low SES students with the transition to college and aid them to be fully committed to the college or university by promoting student success.

Mentorship leads to academic engagement.

There are a variety of factors that can contribute to a student's GPA: one of those variables being the presence of a mentor. A variety of studies have indicated that when a student identifies with a mentor at their university the student has had a higher GPA than those students who have not identified with a mentor (Campbell & Campbell, 1997; Crisp, 2010; Ross-Thomas & Bryant, 1994; Salintri, 2005; Wallace et al., 2000).

A case study conducted by Ross-Thomas and Bryant (1994) developed two unique formal models of mentorship at a historically black college (HBCU). The first model used staff and faculty to mentor first year "underprepared high risk" (p. 71) students through a formalized process to increase retention rates, which were previously low. The second model utilized the college's alumni to mentor second year students who were placed on academic probation to increase the students' GPA and promote academic success. Through the formalized mentoring program, there was a 15% increase in the first year student retention that were classified as high risk and a 5% increase in the mean cumulative GPA of the second year students who were

mentored (Ross-Thomas & Bryant, 1994). In addition, there was a 15% decrease in the probation rate of first year students enrolled in the mentorship program (Ross-Thomas & Bryant, 1994).

In their study, Campbell and Campbell (1997) compared 339 mentored first year students to 339 non-mentored students. Both the control group and experimental group had similar characteristics, such as ethnic background, gender, high school GPA and entering enrollment status. Campbell and Campbell (1997) found that the mentored students yielded a higher GPA and were two times more likely to persist than the non-mentored students. In addition, it was found that the dropout rate of the non-mentored students was higher than those who were mentored. Furthermore, the data supported that the more frequently the mentee and mentor met, the better success the student had with their GPA (Campbell & Campbell, 1997).

In addition, in a longitudinal study comparing mentored students to non-mentored students, it was discovered that students who were mentored had higher grade point averages and higher retention rates (Salintri, 2005). Salintri (2005) followed a group of students for two years who were assigned a formal mentor. Both groups of students followed the same course of curriculum and had the same high school grade point averages. Also, the researcher surveyed a random selection of the experimental group to gather the perceptions of the effectiveness of the program. More than 80% reported that the mentors were effective in enhancing the development of skills and provided resources and strategies for academic success. Results also yielded that mentored students failed fewer classes, had a higher GPAs, and were better retained than the group of students who were not mentored (Salintri, 2005).

Mentorship leads to social engagement.

Personal growth (Chickering & Reisser, 1993), relationship building (Bernier, Larose & Soucy, 2005) emotional support through transitions (Nora & Crisp, 2008; Zalaquett & Lopez,

2006) and the development of leadership skills (Campbell, Smith, Dugan & Komives, 2012; Dugan & Komives, 2010) are examples of out of class activities mentioned in Astin's (1984) research and have all been attributed to students who identified having a mentor through their college experience. Such attributes can contribute to the development of an individual and to the student having a more positive college experience (Astin, 1984; Tinto, 1993).

Chickering and Resisser (1993) developed seven vectors of student development which can all be facilitated by a mentor. For example, a mentor can assist a student in developing purpose by speaking about personal interest, vocational aspirations and professional goals. In this stage of personal development, a college student typically seeks an individual with like interests at the university to discuss these options and a mentor's "knowledge of professional opportunities and attitude in balancing family and work may be crucial in helping students identify and embrace a purposive life" (Ramirez, 2012, p. 57).

Relationship building is another strong skill that enables an individual to be successful. Building a relationship with a mentor can provide the emotional support for a student to be successful when adjusting to college life and help them further in their own personal development. Bernier, Larose and Soucy (2005) found in their study that the mentor-mentee relationships are stronger and more successful when both the mentor and mentee have preconceived dispositions about the relationship. The findings suggested that mentors who provide a relationship with a balance of challenge and support to the student mentee are more effective to the students' success because it enabled them to develop relationships with faculty and staff (Bernier, Larose & Soucy, 2005).

Schlossberg's (1989) transition theory states that individuals ease through change when they have a feeling of mattering and are emotionally supported by another individual through

that transition. Building on Schlossberg (1989), Zalaquett and Lopez (2006) concluded through interviews with 13 Latino students that mentors assisted students through the crucial emotional transition from high school to college and served as an emotional support in that transition easing that transition. The mentors served as a support system for these students as they made the transition to a higher education environment.

Nora and Crisp (2008) further explored emotional development when they surveyed a random sample of 200 adult learners from a community college. The study focused on four major frameworks of the perceptions of the mentoring relationship. The results suggested that students seek mentors because they assisted in supporting the mentee in educational goal setting, provide encouragement, serve as a resource in the student's academic area and are considered as a "safety net" (p. 350) to the student mentee when needed (Nora & Crisp, 2008). Such encouragement can assist a student in making the transition to college while they socially integrate into the university culture.

Leadership development is another important element that can be fostered by the encouragement and role modeling of a mentor. Dugan and Komives (2010) found that mentoring relationships with faculty were significant among leadership outcomes related to the social change model of leadership development. In their study of data collected from 14,252 college seniors, Dugan and Komives (2010) found evidence that mentoring had a positive effect on students' "consciousness of self", "congruence", "motivation", "common purpose to work with others", "ability to work with others through conflict", "citizenship" and "ability to adapt" (p. 538). Overall the research also supported the importance of meaningful faculty mentorship on the leadership development of students. This quantitative research study contributes to the

importance of student perceptions and importance of the personal development of a student through a mentoring model (Dugan & Komives, 2010).

Building on that research, Campbell, Smith, Dugan and Komives (2012) also found in their study that there was a significant relationship between the mentoring process and the student's leadership capacity. They found that students who engaged with mentors felt more empowered to be a leader because of the influence the mentor had on them (Campbell, et. al., 2012). The development of these leadership skills can bolster a student's confidence and enable them to be more comfortable in a given environment and gain social capital.

In each of these studies, students were able to develop a skill that enabled them to be more involved with their personal and academic development; furthering their investment at their respective university. These developmental skills were advanced through the relationship with a mentor and have enabled the student to be more engaged and invested in their education promoting student success and retention.

Summary

In this chapter, the researcher identified three streams relevant to this study. The first stream identified was the characteristics of a successful mentor-mentee relationship. Evident of the research presented, there are many characteristics of a successful mentor-mentee relationship. One of the major debates in the literature is determining a clear definition of the term mentor. In addition, research has presented that there are many types of mentoring relationships, but informal mentoring and formal mentoring are the two major types. Furthermore, the frequency or amount of times a mentor and mentee meet has been a factor that can affect the mentoring relationship.

The second major stream identified by the researcher was the factors related to college student success. Although there are many factors that may affect student success at a college or university, three factors have been identified by the researcher. Academic preparation and engagement, social integration into the university community, and student demographics are the three factors that can affect a student's ability to succeed at a college or university as it relates to this study.

Finally, the third stream identified by the researcher was the mentor and student success. The researcher has identified a number of studies that have associated the effect of a mentor on student success. The literature presented points to the importance of a mentor in higher education to assist a student mentee's success. A mentor can assist a student with their academic engagement in a college or university setting by providing them resources and supporting the student's academic goals. A mentor can also assist in providing support in the student's social integration by encouraging them to get involved in co-curricular activities that can further develop the student's skills and competencies. When a student is more academically engaged and socially integrated, the student will feel more connected to the college and university. A student's success is a byproduct of a student's connection to a college or university and the student is more likely to be retained and persist through graduation.

Low SES students may be at risk regarding the establishment of a connection to a university or college on their own. Low SES students typically arrive to a college or university underprepared academically and may lack the support from home to be socially and academically integrated into the university community. A mentor can be a great asset to the low SES student population and assist them in becoming part of the college or university community. A mentor can assist low SES students academically by connecting them with resources,

discussing academic goals, and serve as an advisor as the students make decisions about their academic endeavors. A mentor may also provide low SES students with the opportunities that encourage social engagement opportunities. Ultimately, a mentor may be a catalyst to academically engaged and socially integrate a low SES to the college or university promoting student success.

Chapter 3: Research Methodology

Introduction

The purpose of this study was to examine the effects of a university semi-structured mentorship program on student success for participating low SES student mentees. The sub-population of college students categorized as low SES students has historically had lower retention rates than students who do not fall into this category at higher education institutions. Mentorship is an essential component to student success and may be the catalyst for other contributing factors that increase retention among the low SES student population in higher education. The primary question of the study is as follows: What is the impact of the mentorship program on the low SES student mentees at a four year urban university?

The secondary research sub-questions guided this study:

1. How do the retention rates and GPAs differ from those low SES students participating in the mentorship program compared to those low SES students who do not participate in the mentorship program?
2. How does the frequency of the interactions between the mentor and mentee impact the GPAs, retention rates, and social engagement of the participating low SES students?
3. What are the primary factors of the mentoring relationship that impact the participating low SES student's success at the university?

The following chapter examines the research design for this study. This case study was focused on the phenomenon of mentoring and its effect on student retention in a college environment, specifically for low SES students participating in a semi-structured mentorship program. For this action research case study, an explanatory sequential mixed method research design was developed in collecting both quantitative and qualitative data (Creswell, 2012).

Following are the details and rationale for the selection of the site and population. Next, an outline of the proposed plan to collect data is offered. The researcher then provides a feasible and practical timeline for the study. Finally the researcher considers ethical implications that need to be considered throughout the collection and analysis of the data.

Research Design and Rationale

This explanatory sequential mixed methods case study used an action research based approach. There are several reasons why this research was classified as a case study. Yin (2009) suggests the defining factors of case study research occur within certain "bounded" structures of place and time (as cited in Creswell, 2013, p. 98). This specific study took place at one specific university and occurred within a set time frame. In addition, case study research seeks to understand a specific issue or problem in a specific setting (Creswell, 2013; Stake, 1995). The research in this study focused on the effects of mentorship on student success at a specific university. In case study research, a variety of qualitative and quantitative data are collected with the intent to develop characteristics from the analysis (Creswell, 2003; Stake, 1995). Both types of data were collected in this study in two separate phases.

Creswell (2012) describes action research as a problem solving process that addresses a specific issue in education. Action research is conducted at the local level by "educational practitioners" in the field and focuses the research in their own setting (Charles & Mertler, 2002; Ravid, 2011). The research in this study was centered on the role of mentoring and its effects on student success in higher education. Many institutions are seeking variables that contribute to student success through graduation. Although action research is not meant to make generalized discoveries, the results of this study may prove to be relevant and useful in other settings

(Charles & Mertler, 2002). This study can provide support to the benefit of instituting mentoring programs to increase student success on university campuses across the country.

A mixed methods sequential design utilizes quantitative and qualitative data in two distinct phases (Ivankova, Creswell, & Stick, 2006). In an explanatory sequential mixed method design, quantitative data is collected and analyzed by the researcher followed by the collection and analysis of qualitative data (Creswell, Plano Clark, Gutmann, & Hanson, 2003 Creswell, 2011). The researcher in this study collected quantitative data in the form of GPAs and retention rates for the mentorship program participating low SES student mentees. In addition, quantitative data was collected through an online questionnaire, specifically asking how frequently the mentorship program participating low SES students met with their mentors. Following the collection of the quantitative data, the researcher collected qualitative data. Qualitative data was collected by the online questionnaire and through one-on-one interviews.

In explanatory sequential design, the researcher also sought to utilize the qualitative data to explain the quantitative data that had been collected previously (Creswell, 2011). In this study, the researcher utilized the answers collected in the one-on-one interviews to offer a rationale for the GPAs and retention rates. The design was also used to classify specific groups of individuals based on the results of the analysis of the quantitative data to gather qualitative data to explain certain trends and characteristics (Creswell, Plano Clark, et al., 2003; Creswell, 2011).

Creswell (2012) states that the analysis of both quantitative and qualitative data through a mixed methods approach will provide a greater understanding of the research problem better than "either approach by itself" (p. 535). In addition, a mixed methods approach investigates the problem from different angles triangulating the data to converge the results (Merriam, 2009; Stringer, 2014; Wisniewska, 2011). As Stake (2005) suggests by combining quantitative and

qualitative research in this study, the researcher anticipates a greater understanding of the impact of mentorship on retention (as cited in Stringer, 2014, p. 93).

Multiple means of quantitative data was collected through this study. Quantitative data enables a researcher to identify trends by collecting numerical data that is analyzed through a statistical analysis (Creswell, 2012). The researcher collected GPAs and retention rates of low SES student mentees in the mentor program and compared it to the GPAs and retention rates of low SES students not in the program. Both GPA and retention rates are dependent variables that may contribute to student success and student retention.

Another source of quantitative data collected through the distribution of online questionnaires. A mixed use of questions utilizing categorical scales through the compilation of nominal and ordinal data was incorporated into the questionnaire. The researcher used the results of these questions to measure how often the meetings took place between the mentor and mentee as well as the student mentees' attitudes and perceptions of the mentoring relationship.

Qualitative data was also collected utilizing multiple means. Qualitative research allows the researcher to develop a deeper "understanding of a central phenomenon" (Creswell, 2012, p. 16). In addition, Merriam (2009) states that qualitative data allows the researcher the ability to understand how people understand the factors that affect their environment. This study provided two opportunities to collect qualitative data through open-ended questions as part of the online questionnaire and through the one-on-one interviews. The open-ended questions on the online questionnaire allowed the participants the opportunity to share their uninfluenced perspective on mentoring relationships (Creswell, 2012).

In addition, through the facilitation of one-on-one interviews, the researcher had an opportunity to gather a perspective by collecting qualitative data from individuals in a real world

setting, thus classifying it as a "case study" (Merriam, 2009; Yin, 2009). When considering priority in this research design, the researcher anticipated that the qualitative data collected through the online questionnaire and one-on-one interviews would explain specifically why the retention rates and GPAs are higher for the low SES student mentees population in the mentorship program at the university. The sequence of data collection was the exact opposite. Quantitative data was collected first through the collection of GPAs and retention rates followed by the online questionnaire and one-on-one interviews, which collected qualitative data. Conducting quantitative research to compare "two or more groups on a variable" followed by qualitative research to discover deeper "the reasons why these differences exist" has been described as an explanatory research design (Creswell, 2012, p. 551). This *explaining results* research approach enabled the researcher to answer the question of "why" the retention rates and GPAs are higher for this sub-population of students being studied as well as determine if there were any correlations among the factors (Creswell, 2012, p. 551).

Site and Population

The site of the research was at an urban four/five year private comprehensive high research activity university located in the Mid-Atlantic region of the United States (Carnegie Foundation for Teaching Standards, 2014). The target population in this study includes 215 low SES student mentees. The researcher sought Institutional Review Board (IRB) approval before the study takes place. All participants were made aware of the nature of the study and potential use of data collected. Following is an in depth examination of the site and population that was used in this study.

Site Description

The university at the time of this study was one of the United States' 15 largest private institutions with an undergraduate enrollment of 12,750 students. There are 200 degree programs housed in 15 colleges and schools. Cooperative education is a critical element of the curriculum. The university is one of the oldest, largest and best known co-operative education institutions in the world. The university has committed itself to the city where it is located and seeks opportunities to engage the city's citizens. The university is one of city's top 10 employers and is a major economic engine for the region. The university has also dedicated itself to be one of the most civically engaged universities in the world. At the time of this study, the cost to attend the university was very expensive. The base tuition for the 2014-2015 academic year for a first year student, not including fees and housing, was $46,386 for a four year student. The mentorship program was established to further engage the city's citizens and to remove financial barriers to city students who may not otherwise be able to attend a college or university.

Site Access Issues

Considering that the researcher conducted the research in their own "backyard" (Glesne, 1999) at the place of employment, the researcher did not foresee an immediate site and/or population access problems. The researcher was intentional in minimizing any issues by meeting regularly with the director of the mentorship program. It was the hope of the researcher to start developing shared expectations to assist the director with improving the mentorship program and researcher throughout the study.

The researcher utilized an Honest Broker (HB) to assist in collecting data from the participants. Boyd, Hosner, Hunscher, Athey, Clauw, & Green (2007) describe an HB as someone who can protect data and "offload the burden of housing identifiable data" for the

researcher. Boyd, et. al.(2007) have used HBs in medical research to maintain participants information in a master list, de-identify participants in the study, and help alleviate any biases from the researcher who may be connected to the study. Since the researcher in this study was connected to the program being researched, the researcher asked the director of the program to serve as a HB in the collection of data. In addition, the researcher sought guidance from IRB to request any further permission to collect the data.

Population Description

The target population for this study was made up of two different subgroups. The first subgroup consists of the mentorship program participating low SES student mentees (n=215). The second subpopulation consists of the low SES students who are not part of the mentorship program (n=215). The researcher worked with the HB/director of the mentorship program to identity low SES students who were not part of the mentorship program, but had similar characteristics identifying them as low SES utilizing Banner/Hyperion, a software system that can aggregate specific subpopulations of the student body based on specific variables: in this case socioeconomic status as determined by the student's families' earned income credit (EIC).

Since the inception of the mentorship program, the institution has offered 50 incoming first year students a renewable scholarship award that covers 100% of the students' fees and tuition. Qualifying students must live in the city and have recently graduated from a city high school, qualify as low income, as determined by the Free Application for Federal Student Aid (FAFSA) and tax/financial documentation, and be classified as high achieving students as determined by the capability to meet the admission criteria of the university. As of the start of the 2014-2015 academic year, the mentorship program had 215 full-time undergraduate students enrolled. Therefore, it can be assumed that there are about 50 students in each class (freshman,

sophomore, junior, pre-junior, and senior). It was not exactly known yet what year the students who were not retained were part, so there may be a difference of a few students for each of these classes.

Since the students are being classified by the university as *low income* based off of their FAFSA and family tax documentation, the researcher used the same factors to define low SES. When the researcher met with the HB/director of the mentorship program, the researcher sought any other demographical information that was available about the student participants for further breakdown of data to be analyzed. Each low SES student mentee is randomly assigned a full-time staff or faculty member from the university as a mentor. Since there were 215 participating mentees for this study, it can be assumed that there were 215 corresponding staff/faculty participating mentors.

Research Methods

Data Collection

The research design of this study consisted of three methods of data collection in two phases. Archival data was gathered through the collection of GPAs and retention rates in Phase I. In addition, an online questionnaire was distributed to collect quantitative and qualitative information to allow SES students participating in the mentor program to share their experiences. Phase II encompassed one-on-one interviews in collecting further qualitative data. The collection of data through multiple methods provided a more complete analysis of the program yielding better results that are less biased (Russ-Eft & Preskill, 2009).

Pilot Study.

Creswell (2013) suggests conducting a pilot study to "refine" the instrument, eliminate potential researcher biases, and "adapt research procedures" (p. 165). The researcher has had a

relationship with some of the low SES students in the mentor program, specifically the two student mentees being mentored by the researcher. The researcher asked those two mentees to gather three additional mentees to serve as a group to pilot and test the online questionnaire. Only four total low SES student mentees were able to participate in the pilot study. The researcher facilitated the questionnaire to the pilot test group for validity purposes. The researcher asked the HB/director of the mentorship program to remove those four individuals from the data collected before the online questionnaire was launched. In addition, the researcher tested the interview questions for the one-on-one interviews with the pilot study group as well to identify any issues with how the questions are being asked.

Phase I.

Phase I included the collection of GPAs and retention rates of two groups of students and the collection of data through an online questionnaire. The questionnaire collected nominal and ordinal data. The first group of students were the low SES student mentees participating in the mentorship program (n=215). The second group of students were also low SES students, but were not enrolled in the mentorship program (n=215). The HB/director of the mentorship program assisted in identifying the second group. Both groups were assigned an identification number by the HB/director of the mentorship program to protect their identity and assist in aligning data throughout the data collection period.

Grade Point Averages (GPAs).

Instrument description. The university owns a content software program, Banner/Hyperion, that can generate reports based on specific characteristics of students. This software system can easily collect GPAs for aggregated groups. HB/director of the mentorship program asked to pull the GPA reports for both groups.

Participant selection. The HB/director of the mentorship program collected the cumulative GPAs of the 215 mentor program participating low SES student mentees on behalf of the researcher. The researcher had the HB/director of the mentorship program use the same variables (i.e. socio-economic level) to gather low SES students at the university who were not part of the mentorship program using the Banner/Hyperion software. The HB/director of the mentorship program then used a randomization software program, Research Randomizer©, to randomly select 215 students from that group to compare to the low SES participating students that are part of the mentorship program.

Data collection. The GPAs for both groups were collected utilizing the Banner/Hyperion software owned by the university. The GPAs were inserted into a Microsoft Excel sheet with the students corresponding identification number and other student demographical characteristics.

Data analysis. Once the quantitative data was collected, a t-test for independent samples using the SPSS software was conducted. A t-test is conducted when comparing two independent samples, specifically an experimental group and a control group (Ravid, 2011). In this scenario, the mentor program participating low SES students served as the quasi-experimental group and the non-participating low SES students served as the control group.

Retention Rates.

Instrument description. Similar to the collection of GPAs, the university owned content software program, Banner/Hyperion, can generate reports based on specific characteristics of students. This software system can easily collect retention rates for the aggregated groups. HB/director of the mentorship program was asked to pull this report. If the status read that the student was currently enrolled at the university, it was assumed that they have been retained.

Participant selection. The 215 mentor program participating low SES students served as the quasi-experimental group. The randomly selected non-participating low SES students served as the control group.

Data collection. The university was able to provide the data for this test. Historical data from the university's Office of Institutional Research provided the retention rates for the low SES students who were part of the program as well as low SES students who were not part of the program.

Data analysis. A simple comparison of the retention rates were made by the researcher between the students who are mentored and the students who are not mentored.

Questionnaire Data.

Instrument description. An online questionnaire instrument was created and piloted prior to being sent to all low SES student mentees asking three dichotomous questions (yes/no) with an opportunity to provide some qualitative data. See Appendix B for the online questionnaire questions.

Participant selection. All 211 mentor program participating low SES students were invited to take part in the online questionnaire. The four student mentees who served in reviewing the questionnaire did not participate in the questionnaire data collection. A letter had been drafted (see Appendix A for sample letter) by the researcher and was sent by the HB/director of the mentorship program to explain the scope of the study inviting the students to participate.

Data collection. Data was collected by a university owned online data collection software, Qualtrics. The online questionnaire stayed open for two weeks.

Data analysis. Data was downloaded into an Excel worksheet via Qualtrics. The researcher worked with the HB/director of the mentorship program correspond this data to the previous data collected for each student. The HB/director of the mentorship program was asked to match the GPA of the low SES mentor participating students to their corresponding answers from the online questionnaire. A master Excel sheet with all corresponding information was given to the researcher including the identification number assigned by the HB/director of the mentorship program of low SES mentee, GPA, race, gender, and answers to questionnaire questions.

Quantitative data from the online questionnaire was analyzed using a Pearson's correlation in the SPSS software to measure specifically if there was a relationship between how often the student mentee met with their mentor and the student mentee's GPA, retention rates, and the ability to be socially engaged. According to Ravid (2011), a Pearson's correlation is used "to measure a linear relationship between two continuous variables" (p. 242).

The qualitative data from the questionnaire was coded using a color scheme and then grouped by similarity utilizing Nvivo©, a qualitative data analysis software program. Again, the comments were compared to the corresponding student's GPA and retention rates to observe if the mentorship relationship had any positive or negative effect on the student's experience. This data was also further analyzed in Phase II.

Phase II.

Phase II included the collection of qualitative data through one-on-one interviews. Qualitative data collected through the online questionnaire was also analyzed in Phase II.

One-on-one Interviews.

Instrument description. Several questions had been developed to facilitate the semi-structured one-on-one interview with the low SES student mentees in Phase II (see Appendix C).

Participant selection. In Phase I, the eligible 211 low SES students participating mentees were invited to take part in a one-on-one interviews within the online questionnaire. The four students who served in the pilot were not eligible to participate in the one-on-one interviews. The HB/director of the mentorship program collected the names of the participants willing to take part in the online questionnaire and utilized a Research Randomizer to select eight participants for the one-on-one interviews. Although Guest, Bunce, and Johnson (2006) suggest 12 participants in one-on-one interviews, the researcher selected eight because of the time limits set on the study to be conducted.

Data collection. The one-on-one interview participants were invited to take part in an online one-on-one interview through BlackBoard Learn Collaborate© classroom. It was the intent of the researcher to have eight total participants. Each student was assigned a letter by the HB/director of the mentorship program to conceal the identity of the student during the one-on-one interview. Participants were made aware that their responses to the questions would be used as part of this research and anonymous. In addition, the researcher informed the participants that their responses would be recorded. Questions were asked of the individual by the researcher and the session was recorded through the BlackBoad Learn Collaborate© system, with an IPhone© application used as backup. Voices were only heard in the BlackBoard Learn Collaborate©; no faces or other identifiable features were visible.

Data analysis. The researcher utilize a transcription service, Rev ©, to transcribe the audio notes into a Microsoft Word document. The researcher also asked the HB/director of the

mentorship program to correspond the letter of the participant to the number previously given to that participant earlier in the study. This enabled the researcher the ability to correspond the qualitative data collected through the one-on-one interview with the GPAs, retention rates, and other qualitative data collected through the online questionnaire in Phase I to the data collected in Phase II to see if there were any correlations between the factors.

Data was entered into a spreadsheet then coded using a color scheme. Corresponding information from Phase I was aligned with the participants. In addition, the transcribe notes were coded and analyzed utilizing Nvivo©.

Demonstration of Alignment

The following chart demonstrates the alignment between the research questions, the research method and design utilized, and the data source:

RESEARCH QUESTION	RESEARCH METHOD	DATA SOURCE
1. How do the retention rates and GPAs differ from those low SES students participating in the mentorship program compared to those low SES students who do not participate in the mentorship program?	Quantitative-(*Quasi-Experimental)* t-test for independent samples	Historical Data • GPAs • Retention Rates
2. How does the frequency of the interactions with the mentor and mentee impact the GPAs, retention rates, and social engagement of the participating low SES students?	Quantitative (*Correlation*) (collection of data through questionnaires)-Pearson's Correlation	Online Questionnaires

3. What are the primary factors of the mentoring relationship that impact the participating low SES student's success at the university?	Qualitative (collection of data through questionnaires and one-on-one interviews)	Online Questionnaires and One-on-one interviews

Stages of Data Collection

Figure 1 below outlines the timeline that was utilized for the data collection:

DATES	TASKS	PARTICPANTS INVOLVED	PURPOSE
March 15, 2015	Pilot Study	Four student mentees	To determine the clarity of questions being asked and the length of time needed for one-on one interviews
March 23, 2015	Collection of GPAs/Retention Rates (Phase I)	215 participating student mentees; 215 corresponding non-participating low SES students	Compare the GPAs and retention rates of those who are part of the mentoring program to those students not part of the mentoring program(but are classified as low SES)
March 30, 2015	Online questionnaire launched (Phase I)	210 participating student mentees	Collect nominal and ordinal data, as well as qualitative data about the mentee's experience with the mentor
April 13, 2015	Online questionnaire end (Phase I)	210 participating student mentees	Collect nominal and ordinal data, as well as qualitative data about the mentee's experience with the mentor
April 14, 2015	One-on-one interviews begin (Phase II)	Eight randomly selected student mentee volunteers	Collection of qualitative data on the student mentee's experience with their mentor and its impact on their student success
April 30, 2015	One-on-one interviews end (Phase II)	Eight randomly selected student mentee volunteers	Collection of qualitative data on the student mentee's experience with their mentor and its impact on their student success
April 30-May 18, 2015	Begin coding analyze, and triangulate data	The researcher	To triangulate the data and answer the questions posed in the proposal
All dates were contingent on final approval by IRB			

Figure 1. Timeline for data collection.

Ethical Considerations

The researcher had identified two ethical implications that could have presented themselves through this research. The first issue the practitioner-researcher faced was defining balance in this dual role through the research process as researcher and serving in the role as a mentor in the mentorship program. Since the researcher was doing the study "in their own backyard," the researcher needed to conduct the study from an unbiased perspective (Creswell, 1998). The researcher used an HB to protect the identity of the participants. The HB/director of the mentorship program was able to use a system to identify students by utilizing identification letters so the researcher can align corresponding data to the participants. In addition, to protect the identity of the participants the one-on-one interviews took place in BlackBoard Learn Collaborate© which concealed the identity of the participating mentees.

The second issue the researcher faced was developing a process to protect the data. It is important for the researcher to examine and be aware of any ethical implications that could present itself through the data collection and analysis process. It was imperative that the researcher minimized biases and kept student mentee and mentor data confidential. Every researcher should be responsible for creating safeguards to prevent any ethical dilemmas from being presented through the research process. Since the researcher was using the director of the program as an HB, identifiable information essentially make the participants information anonymous. The researcher, however, still was very protective of the information and data collected. All information was stored on a password protected encrypted USB key kept in the researcher's possession.

Chapter 4: Findings, Results, and Interpretations

Introduction

The purpose of this action research mixed methods case study is to identify the variables that contribute to the success of low socio-economic students (SES) in a mentorship program at a four year urban institution. The primary question of the study is as follows: What is the impact of the mentorship program on the low SES student mentees at a four year urban university?

The secondary research sub-questions guides this study:

1. How do the retention rates and GPAs differ from those low SES students participating in the mentorship program compared to those low SES students who do not participate in the mentorship program?
2. How does the frequency of the interactions between the mentor and mentee impact the GPAs, retention rates, and social engagement of the participating low SES students?
3. What are the primary factors of the mentoring relationship that impact the participating low SES student's success at the university?

A mixed methods explanatory sequential design was utilized to collect data in answering the research questions for this study in two phases. In Phase I, archival quantitative data was gathered by the researcher through the collection of GPAs and retention rates for two groups of students utilizing an Honest Broker (HB)/director of the mentorship program. The two groups of students included the 215 student mentees currently participating in the mentorship program and 215 randomly selected students from the university classified as low SES not enrolled in the mentorship program. An online survey was also distributed to 211 of the 215 low SES student mentees participating in the mentorship program in Phase I to collect additional data. Four students who participated in a pilot student were eliminated from Phase II of the study. This

online questionnaire allowed the researcher to collect additional quantitative data as well as qualitative data through the open-ended questions presented. Of the 211 possible participants, 68 student mentees completed the online questionnaire. In addition, the online questionnaire asked participants if they were willing to take part in Phase II of the study by soliciting their participation in a one-on-one interview. Of the 211 participants asked, 26 acknowledged that they would be willing to participate in the one-on-one interview.

In Phase II, the researcher presented the HB/director of the mentorship program with select dates and times within a one week period for the one-on-one interviews to take place based on the availability of the researcher to conduct the interviews. The HB/director of the mentorship solicited the 26 student volunteers to engage in the one-on-one interviews by presenting them with those dates and times. Of those 26 student volunteers, 12 student participants were able to accommodate their schedules to participate. An electronic letter (see Appendix D) was then sent to those 12 participants by the HB/director of the program officially inviting them to select a time and date that best fit their individual schedule to participate in the interview utilizing a Doodle Poll©, an online scheduling tool. Of those 12 participants, eight initially signed up for a date and a time slot to participate in the one-on-one interview. The HB/director of the mentorship program then officially scheduled each student by assigning them a letter and sending a confirmation email with their assigned date and time. Seven of the eight actually participated in the interview; one student needed to back out of their appointment at the last minute and was unable to reschedule a date and time to participate. The remaining seven participants participated in the one-on-one interview with the researcher utilizing BlackBoard Learn Collaborate©, an online collaboration tool.

Participant Demographics

As previously mentioned, this mixed methods explanatory sequential study utilized two phases to collect both quantitative and qualitative data. At the time of this study, specifically for Phase I, there were 215 participating low SES student mentees in the program. Figure 2 provides a breakdown of the demographics of the population of students who are currently enrolled in the program.

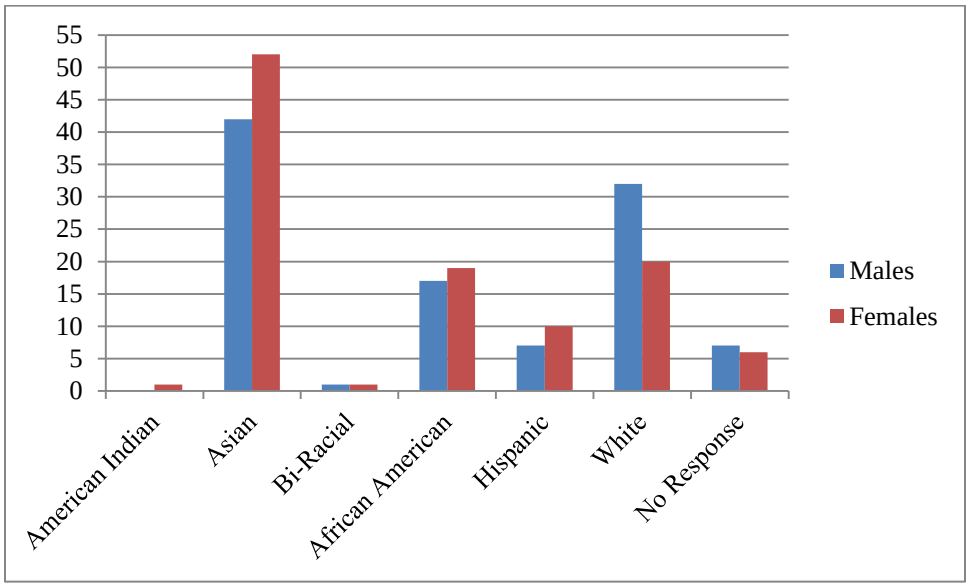

Figure 2. Demographics of low SES student mentees currently in program (N=215).

During Phase I of the study, an invitation was sent out (see Appendix A) to the 211 of the 215 current low SES student mentees participating in the mentorship program being studied. The four students who participated in the pilot study were not sent the invitation to participate. Initially, after keeping the online questionnaire open for two weeks, 73 responses were received. After reviewing the data it was established that 68 were unique responses yielding a 32.2% return rate. Of the 68 respondents, 37 were identified as male, 25 were identified as female, six student identities were unknown. Figure 3 further breaks down the race of those who responded.

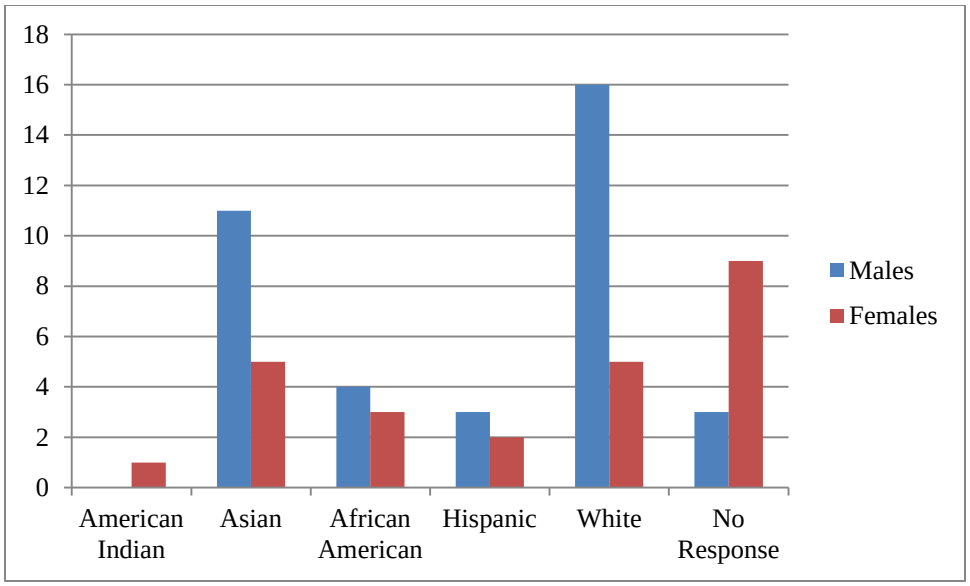

Figure 3. Race identities of those low SES mentees who participated in online questionnaire (N=68).

Through the online questionnaire, the 68 students were invited to participate in a one-on-one interview. Of those 68 students, 26 indicated that they were interested in partaking in a 30 minute semi-structured interview. The HB/director of the mentorship program sent a letter to all 26 willing to participate in the one-on-one interview (see Appendix D). These 26 students had three days to respond to a Doodle Poll©, an online scheduling tool, to sign up for a date and time to participate in the one-on-one interview. Because of the limitation of times given along with the fact that final's week was taking place while the one-on-one interviews were happening, eight students signed up to participate for the interview. Ultimately, one student had to cancel their interview therefore only seven student mentees actually participated in the one-on-one interview.

The seven interviews took place over a week via BlackBoard Learn Collaborate©, an online collaboration tool. Each student was given a letter to conceal their identity throughout the

interview. Each interview audio was recorded utilizing the BlackBoard Learn Collaborate© online system. In addition, an IPhone© Voice Memo application was used as a back-up. Once the data was recorded, it was sent to rev.com, an online transcription and translation service that transcribed the audio data yielding 41 written pages in total.

As previously mentioned, to protect the identity of the participants, each participant was provided a letter utilized during the one-on-one interview. The letter assigned to each of these students was carried throughout the interview and study. In Table 1 below, the participants' information and demographics are organized with the following information: participant letter provided during the interview, class year, gender, and race.

Table 1.

Demographics of Low SES Student Mentees Participants in One-on-one Interviews

Pseudonym Letter	Sex	Race	Years
A	Female	White	Sophomore
B	Female	White	Freshman
C	Female	Asian	Freshman
F	Female	White	Sophomore
G	Unknown	Unknown	Unknown
H	Male	White	Sophomore
I	Male	White	Freshman

Findings

Quantitative Data

All quantitative data was collected in Phase I of this study. The first part of Phase I examined historical data, specifically GPAs and retention rates. The second part of Phase I collected quantitative data through the online survey that was completed by 68 of the low SES students participating in the mentoring program.

Grade Point Averages.

The university owns a content software program, Banner/Hyeprion, that can generate reports based on specific characteristics of students. The HB/director of the mentorship program provided the researcher with the cumulative GPAs of 215 low SES students participating in the mentoring program. The sex, class year, and race description were also included by the HB/director of the mentorship program with the corresponding students GPA.

Utilizing the Banner/Hyperion software, the HB/director of the mentorship program was able to run a report of cumulative GPAs for all students who met the same criteria of those students who are defined as low SES students at the university but are not part of the program being studied. Utilizing a randomization tool, the HB/director of the mentorship program then randomly selected 215 students GPAs to serve as a control group.

Using IBM SPSS Statistical Software©, the researcher utilized an Independent Samples T-Test to compare the two sets of GPAs to determine if there was a statistical significant difference between the two groups. It was determined that the mean GPA of the students participating in the mentoring program was slightly higher than the mean GPA of the control group. However, the results of the Independent Sample T-Test indicated that that there was not a significant difference in the GPAs for those who were part of the mentoring program (M=3.19, SD=.473) and those students who are not part of the mentoring program (M=3.12, SD=.638); t (4.28)=-1.39, p=.165. The p value (.165) was > .05, therefore the results indicate there is no statistical significance in the two groups' GPAs.

Retention rates.

According to the Office of the U.S. Department of Education (2016), retention rates are defined as "the percentage of a school's first time, first year undergraduate students who continue at that school the next year". At the time of this study, the overall student retention rate at the university being studied was 85%. The retention rate of the low SES students participating in the mentoring program was 86%. The retention rate of the low SES students not participating in the mentoring program was 75%. Clearly, those who participate in the program being studied retain at rates higher than the general student population as well as better than students who are low SES and are not part of the mentoring program. Figure 4 illustrates these percentages in a graph.

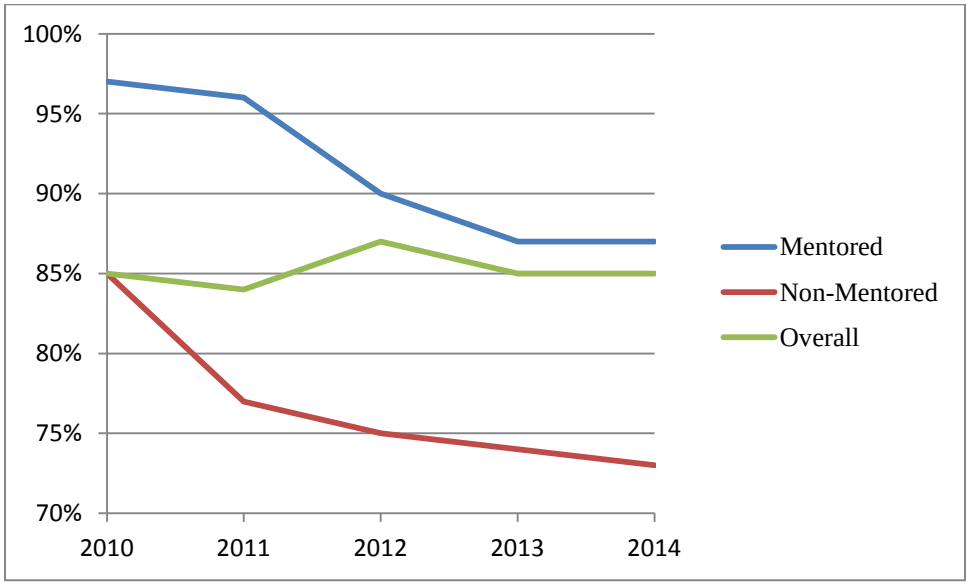

Figure 4. Graph representing percentage rates of all students at the university (overall), the low-SES students that are part of the mentorship program, and low SES students not part of the mentorship program.

Frequency of meetings.

In this study, frequency is described as the number of times a student mentee meets with their mentor. In Phase I of the study through the online questionnaire, the low SES student mentees were asked on average about how often they met with their mentors in any given term. Five multiple choices were provided. Figure 5 breaks down the options provided to the participants when asked to describe how often they met with their mentor.

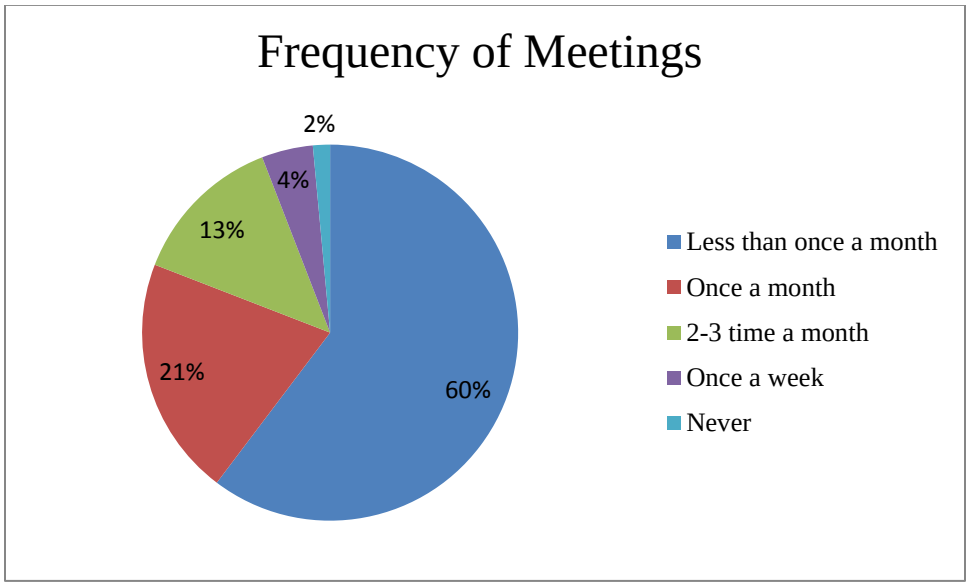

Figure 5. Pie chart illustrating the percentages of how often the low SES students surveyed met with the mentor (N=68).

A Pearson correlation was computed to test the relationship between the frequency of meetings and the other variables identified in each question asked in the online questionnaire. Following is a summary on the analysis of each computation.

Based on the Pearson's correlation analysis between the frequency of meetings between the student mentee and their mentor and the student's GPA, there was a negative moderate

correlation between the two variables (r= -.416, p= .001). Based on the p value of .001, it can be stated that this correlation was statistically significant. Further review of the data indicates that the students with lower GPAs tend to meet with their student mentors more often possibly seeking additional academic assistance. Therefore, their current GPAs may be lower with the intention to improve through the meetings.

Similarly, based on the two-tailed test, there was a statistical significance between the frequency of meetings and the student's overall satisfaction with the student's relationship with their mentor. There was also a moderate positive correlation between the two variables, r= .341, p= .007. Through the analysis of the data, there was no evidence of statistical significance based on the two tailed test and a low positive correlation between frequency and academic success (r= .131), social engagement (r=0.078), retention (r=.207), and satisfaction with the mentor (r=.091).

Qualitative Data

In Phase I, qualitative data was collected via the online questionnaire which asked seven open ended questions allowing participants to answer freely. Each of these questions was correlated to the previous dichotomous question asking the participant to explain the reasoning for the previous question answered. In Phase II, the researcher asked eight semi-structured questions to gather additional qualitative data. These questions were developed to seek a richer reasoning for the questions asked through the online questionnaire.

The qualitative data from the online questionnaire and on-on-one interviews were then grouped and analyzed. Several reviews of the qualitative data were completed to identify a list of categories and themes. The researcher utilized Nvivo©, a qualitative data analysis software, to code and group the data. Five themes and several subthemes emerged. Figure 5 illustrates theses

themes. Following are the descriptions of these themes with supporting qualitative data from the online questionnaire and one-on-one interviews.

The data is discussed below in Figure 6 by each emerged theme. First, an overview is presented with some preliminary quantitative data collected through Phase I on each theme. Next, the question that was used to collect the qualitative data is presented. Finally, the researcher organizes the data by presenting the data that was collected via the online questionnaire and then the data collected through the one-on-one interview.

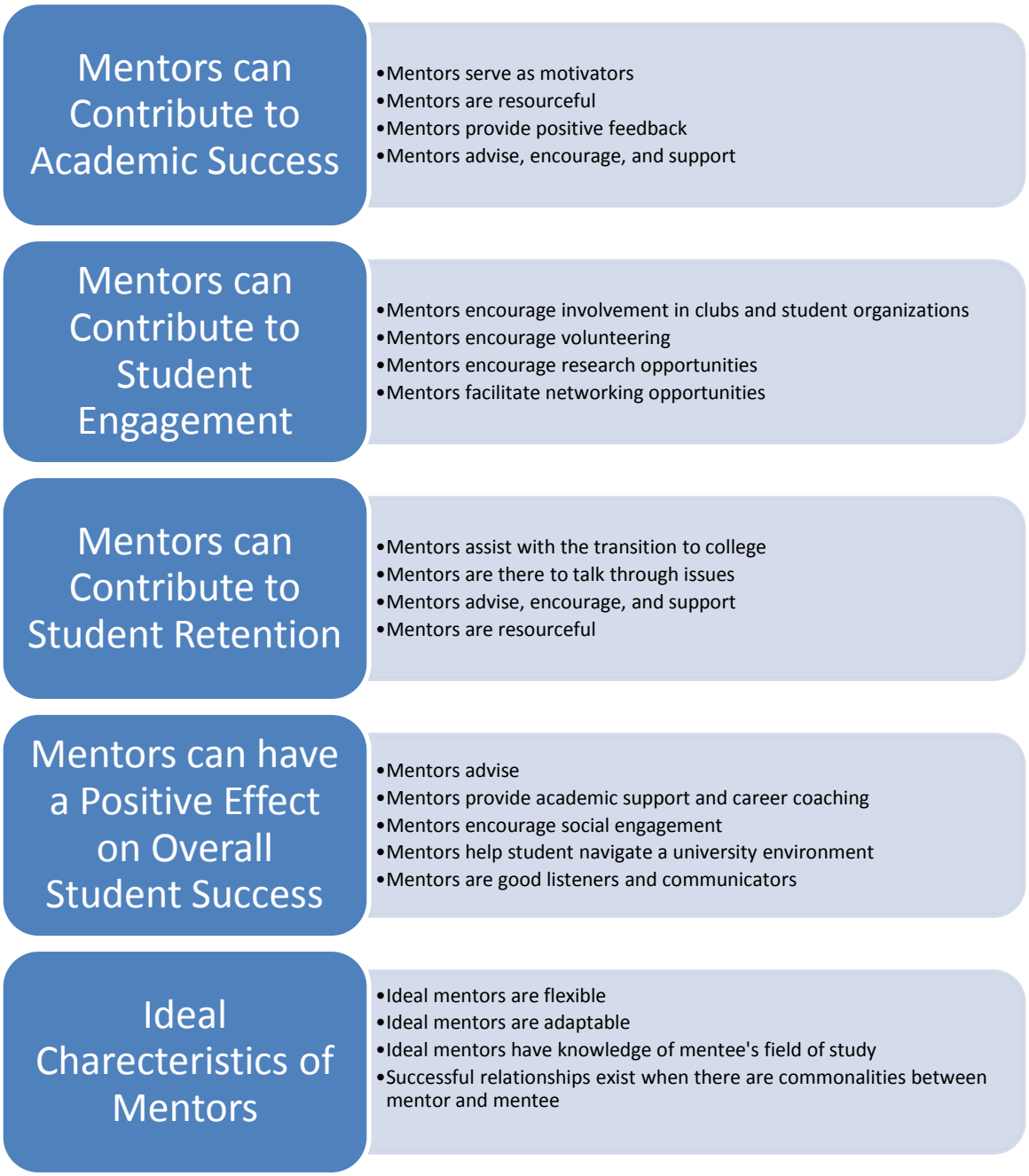

Figure 6. Themes and subthemes that emerged from qualitative data collected through online questionnaires and one-on-one interviews.

Mentors can contribute to academic success.

The first major theme that emerged from the study was that the mentor can contribute to the academic success of the student mentee. Although a majority of the student mentees surveyed did not think the mentors contributed to their academic success directly, those who did feel that the mentor contributed to their success felt so for a variety of reasons.

Though only 28% of the participants noted in the online questionnaire that their mentor had an effect on their academic success as a student, qualitative data suggests that their mentor does have some impact on it. Of the 68 participants who answered the online questionnaire, 27 noted when asked that their mentor had assisted them with their academic success. Of the remaining 41 responses, none of them stated that the mentor had a negative effect on their academic success. Table 2 illustrates the frequency of sub-themes that emerged from the 27 student mentee participants who expressed in their comments that the mentor did have a positive effect on their academic success. The first column identifies the sub-theme while the second column indicates the number of students who expressed that sub-theme in their comment.

Table 2

Sub-themes that Emerged from Mentees Responses Regarding Mentor Effect on Academic Success

Theme	Number of Responses
Mentors are resourceful	8
Mentors advise, encourage, and support	7
Mentors serve as motivators	6
Mentors provide positive reinforcement	3

N=27

Questionnaire question: Do you believe the mentor has had a positive effect on your academic success (GPA) at the university? Please explain.

Online questionnaire.

It can be suggested that a mentor can assist a student academically when they are under certain circumstances. One student who was having difficulty adjusting to the rigor of the institution stated, "considering the recent events in my life, having my mentor understand and make himself available to me has helped me come back stronger than I could have." Another student noted, "They [the mentor] do give advice and guidance, and they [the mentor] give [sic] me motivation and a gentle push in the right direction. Having no mentor would definitely [have] dropped my GPA and academic success." Another student adds, "There have been times when I feel behind and she [the mentor] was able to give me advice on how I can rectify the situation." Another student who was having trouble adjusting to the transition from high school to college added the following thought:

> My mentor is very supportive and always helps me do the best I can. I know I can always go to my mentor for help. My transition from high school to college was rough. However, my mentor helped me reorganize my schedule and get on the right track this quarter. Now I have straight A's in all of my classes.

Students also noted that their mentors have offered them some resources to be successful, especially when it comes to finding tutoring and honing study skills. One student stated, "My mentor did talk about how I was struggling a bit [the] first time and helped me learn how to study and where to get tutoring." Another student said, "She [the mentor] offers tips and such" while another stated, "My mentor told me to get tutoring and where and how to go about it."

And yet another student added that, “My mentor has helped me map out my plan of study which I still use to this day.” The student continues, “My mentor provided me with lots of information and strategies for achieving academic success…it helped me plan out which classes I need to focus more in [sic] and which classes I need to prioritize.”

A number of the comments also suggested that the mentor serves as a positive reinforcement to the student’s academic success. One student stated, “They [the mentor] gives advice and guidance, and they give me motivation and a gentle push in the right direction.” Another student adds, “I have an extra person monitoring my performance, so it adds more pressure for me to do good.” Another student mentee described their mentor’s words of wisdom, “Sometimes some words of advice sticks [sic] and helps as one gets along with life…which can contribute to my success as a student.”

Encouragement, advice, and support are words that resonated with many of the students when they speak of their mentors serving as a positive reinforcement when it comes to academic success. One student states, “My mentor pushes me to challenge myself and makes sure I am on top of my game.” Another student adds, “She always encourages me to take things one step at a time and talks to me about how to prepare for upcoming events.” And another student stated, “My mentor has pushed me to do my best.”

Other students had similar comments describing their relationship with their mentor by saying that the “positive reinforcement was great” and the mentor “is very supportive and always helps me do the best I can.” Another student stated, “Mentally it helps me feel like I am doing better in class.” While another student added, “My mentor is like a checkpoint where I would reflect on what I did the past term and try to improve myself.” Another student adds, “With my

mentor I have an extra person monitoring my performance, so it adds pressure for me to do good [sic]."

One-on-one interviews.

Further qualitative data from the one-on-one interviews support that the mentor has served the students well when it comes to academic success. Each participant in the one-on-one interviews was asked the same question that was part of the online questionnaire, but as a follow-up the participants were asked to expand on their answer. Of the seven students interviewed, four indicated that their mentor did have an effect on their academic success, while the remaining three indicated that they really did not.

Student B stated that when they were struggling one quarter that their mentor was there for them and was able to talk out the issues they were having. She stated, "I think just talking to her [the mentor] and figuring out what I can do to get my grades up…it has been helpful." Student B, who was struggling in some classes, added that her mentor pointed her to the learning center where she could get assistance and support for those classes.

Student C stated that their mentor has assisted her as well with words of encouragement, which pushed her to be successful:

> My mentor has pushed me to do the best that I can and she has gave me small celebrations, like "Yay!" and "Good job!" [sic] And she was always supporting me to do better or just do the best that I can for each class or each course. So, yeah, she has made a big impact because she's always being behind the back ... in a good way! Being behind my back, like pushing me and just congratulating me for all the little things that I've done.

Both Student F and Student G indicated that although they have an academic advisor, the mentor can sometimes serve as a resource when it comes to selecting the right classes. Student F, for example, was in the process of changing majors and the mentor was able to provide some added direction in choosing the right major that fit Student F's interest ad career goals.

Student G also indicated that their mentor helped them pick the certain classes related to their major. When asked if that was a role of an academic advisor, Student G stated the following:

> Even though I do have an academic advisor, I believe they're [the mentor] more suited in the sense that they're there to help me pick out the classes that I would need or would need to take. Whereas my mentor is there to help me expand on why I need to take the classes, or what good certain classes would come of helping me in the future, or even in my co-op, because he has the experience in the field already.

And although Student A said that her mentor did not contribute directly to her academic success, she did note that her mentor did encourage her to get some tutoring when she was having some challenges in a class. Student A states, "I was really struggling with my humanities class during the fall she helped me find resources to where I could get tutoring."

Mentors can contribute to student engagement.

There are many opportunities to be engaged on campus. Joining a student organization or club, volunteering, and/or participating in work study are all examples of ways to be involved on campus. Again, although the majority of the students noted that the mentor did not influence their overall ability to be socially engaged on campus, there were some themes that emerged from those who did feel that their mentor did have an influence on their social engagement.

When asked if the mentor has had an effect on the student mentee's ability to be socially engaged, 42% indicated that the mentor did. Of the 68 participants surveyed through the online questionnaire, 30 noted in their explanation that the mentor has had a positive effect on their ability to be socially engaged. Of the remaining 28 participants, 23 did not leave a response while the other five indicated that they were able to be socially engaged on their own accord. Table 3 illustrates the frequency of sub-themes that emerged from the 30 student mentee participants who expressed in their comments that the mentor did have a positive effect on their social engagement on campus. The first column identifies the sub- theme while the second column indicates the number of students who expressed that sub-theme in their comment.

Table 3

Sub-themes that Emerged from Mentees Responses Regarding Mentor Effect on Social Engagement

Theme	Number of Responses
Mentors encourage involvement in clubs and student organizations	18
Mentors encourage research opportunities	7
Mentors facilitate network opportunities	3
Mentors encourage volunteering	2

N=30

Questionnaire question: Do you believe the mentor has had an effect on your ability to be socially engaged at the university? Please explain.

Online questionnaire.

Joining a student organization or club is one way to certainly be socially engaged on campus. For one, joining a student organization can assist a student in finding a group of other

students with the same interests. One student mentioned, “She [the mentor] told me to join [an] organization of my own country.” Another student noted, “My mentor suggested joining clubs that could possibly interest me based on when they [the members of that organization] met up.” Another student adds, “I want to pursue this major so my mentor advised me to join the American Society of Mechanical Engineers.”

Volunteering is another way to be socially engaged at a university. Several students noted that their mentor shared with them opportunities to do so. One student explains their experience:

> My mentor has also talked to me about how important it is to volunteer and shadow dentists since I plan on becoming a dentist in the future. Because of this, I searched for shadowing opportunities in my neighborhood and had success. One dentist I shadowed asked me to be a receptionist at his office, which has exposed me to the environment in which I will work one day.

Research opportunities are also a way to be socially engaged. Student mentees also noted that their mentor has provided them chances to participate in research, which may not only contribute to academic success, but also provide an opportunity for the student mentee to be socially engaged with others who share the same research interests. One student notes, “I was able to reach out to certain associate professors to look for research opportunities because of my mentor.” Another student adds, “My mentor has got me engaged in [a research program]. During the summer, I may now be going to Germany to be doing some research [with that program].” Another student stated, “I joined a research lab over the summer to take on a project with the guidance and mentoring of my mentor. She was very supportive and encouraged me to partake in campus activities.”

Ultimately, being socially engaged by joining a club or student organization, participation in volunteering opportunities, and partaking in research initiatives; these activities lead to opportunities to network with others who share common interests. Many students noted how their mentors have provided these networking opportunities through the encouragement to be socially engaged at the university. One student exclaims, "They've [the mentor] definitely encouraged me to take part in more extracurricular activities, and through meeting with them at their office in the university I've been able to meet many of their coworkers and network a bit!" Another student added that they were "able to network around campus with their mentor". Another student mentee adds, "My mentor helped me realize that people on campus are actually very approachable and that never hurts."

One-on-one interviews.

The one-on-one interviews contributed more evidence that a mentor can contribute to the ability for a student mentee to be socially engaged at the university. Student B noted that their mentor "definitely" contributed to be socially engaged through her comment:

> I know that I wanted to join a club or do something within my major. She really encouraged me to branch out and I have a really hectic schedule with my sports. It was really hard for me too ... I knew it was very hard for me to join a club and do extra-curriculars, but I think that from talking to her she eased my mind about it and just told me that joining clubs and being engaged in the university doesn't have to take hours out of my week.

Student C, who self-proclaimed that she was socially awkward when she first came to the university claims that their mentor encouraged her to get involved with clubs and activities to

meet others. Student C states, “She [the mentor] has helped me become more social and a more outgoing person.” When asked, Student C stated that by joining student organizations based on her specific interest she has been able to meet others who share those interest enabling her to open up more freely.

Another student who was interviewed supported this notion by sharing her story about being socially engaged on campus. Student F stated that she was not involved her first term at the university, but her mentor advised her to find an organization that further “peak” her interest. Since then Student F has joined three student organizations and participates in intramural sports.

Student I shared how his mentor encouraged him to get involved on campus to meet new people. Student I states, “He [the mentor] encouraged me in the beginning of the year to join at least one group to meet new people and get involved.” When asked in the interview if he had taken that advice, Student I shared that he thought about joining a fraternity but he stated that was not “necessarily my thing”. Student I, however, did join the university ambassador club and participates in intramural sports as well. When asked how that experience has been, Student I stated, “It has really been a great experience” and that it had provided him an opportunity to “bond” with others, similar to what may have taken place if he had joined a fraternity.

Mentors can contribute to student retention.

When the low SES students were asked if they believed their mentor contributed to their ability to be retained, the responses were split. A slight minority of the 68 respondents (49%) believed that their mentor did contribute to their ability to be retained while the remaining 51% did not believe that to be the case. When asked to explain their reply to the question, reasons

explaining the responses were either positive or neutral. No responses indicated that the mentor contributed negatively to the student's retention.

Questionnaire question: Do you believe that your mentor has had an effect on your ability to be retained as a student? Please explain.

Online questionnaires.

For those students who felt that their mentor did contribute to their retention, the main reason indicated was because their mentor assisted the student with their transition to the university. One student stated, "My mentor has helped me transition from high school to college." Transitioning from a high school to a college environment can be challenging and a mentor can assist a student mentee with that adjustment. One student who was really struggling through his adjustment shared an experience where his mentor assisted with his transition into college:

> Freshman and sophomore year were overwhelming because of the rigorous material I was exposed to in my classes. I barely had time for anything except studying. It was stressful from the very start but she guided me and gave me resources that helped me improve. By the time she left on maternity leave, I had a great understanding on how to study for my science classes and create a better balance. If I didn't have these skills, my grades at college would probably be so low that I would have no choice but to transfer and take longer to graduate.

Other student mentees continue to express how their mentor was able to be there for them when they simply needed someone to talk through issues they were facing. One student stated, "To have a mentor is like having someone who is wiser and has more experience to talk to

through tough times." Another student stated, "I talk to my mentor about each of my classes each meeting and whenever an issue arises, he [the mentor] helps me think of ways to fix the issue and prevent from something happening in the future." Another student adds, "My mentor has been a vital part of my support system and [the mentor] has helped me be able to continue as a student here with the advice provided."

A similar theme emerged when asked how mentors assist with retention. Several student mentees stated how their mentor is there to advise, encourage, and show support. One student states, "The advice she [the mentor] has provided me about studying, I've applied and it has helped me stay good with my GPA." Another student states, "My mentor offered me different and positive advice that kept me on track." Another student adds, "Whenever I need advice she [the mentor] she is always there to help."

Yet another theme emerges from the student mentees when it comes to mentors providing the ability for students to be retained. The student mentees continue to add how a mentor can serve as a resource in providing the student the ability to be retained. One student states, "My mentor gave me more resources that I could easily access…" Another student mentee states, "If my mentor doesn't know something, she can point me in the right direction or can find out the information for me."

One-on-one interviews.

Most of the comments from the one-on-one interviews were similar to what was described in the data from the online questionnaire. One student's comments through the one-on-one interview, however, described how his mentor directly supported him and prevented the student mentee from leaving the university. Student G shared how he had an issue at the

university and was about to leave the school, but his mentor ended up being there for him and helped him through the incident. Student G stated, "He was there as opposed to anybody else, his support has helped me realize that there is actually real support at the school." Student G continued how impactful his mentor was then and has been ever since.

Mentors can have a positive effect on overall student success.

When asked by the online questionnaire, a majority of the students felt that their mentor did contribute to the overall student success in a positive manner. Of the 68 participants, 78% said that their mentor did have a positive effect on their student success. Again, comments from the follow-up question were mostly supporting that a mentor does have a positive effect; no comments indicated that a mentor had a negative effect on student success.

Questionnaire question: Has your mentor had a positive effect on your success as a student overall? Please explain.

Online questionnaire.

There were a variety of reasons why the student mentees indicated why their mentor had a positive effect on their student success. Many of the responses dictated that because of the advice their mentor gave them, the student mentees expressed that they were successful as a student. One student states, "My mentor has been very encouraging and provided great advice", stated one student. Another student added, "….he [the mentor] is there as someone I can talk to when I needed advice." Another student stated, "Leaving our meetings, I felt more confident on the things I should be doing and how I should go about things." Thanks to the advice of my mentor provided, I am able to get through a lot of hold ups." Another student added, "My mentor has given me some helpful tips to be successful."

Many of the students talked about how they utilize their college assigned academic advisor for academic support, but many of the students surveyed also stated how helpful their mentor has become when it comes to being successful academically as a students and how that contributes to their overall student success. One student discussed their experience:

> My mentor has given me a good amount of advice, especially when I had trouble with math and thought about switching majors. It was less of can you do it and more about finding something that would interest me and give me the drive to do it.

One specific student spoke about how his mentor coached him through his career goals and specifically what he should be doing academically now. The student described his experience with his mentor:

> When I talk to my mentor about struggles I am going through in class, he offers suggestions, such as how to study more effectively. We talk about my plans for the future and how to prepare for each step. Since I plan to go to dental school, we mainly discuss ways I can boost my GPA, places at which I could volunteer, and how to be a student that stands out from the rest. Through talking to him, I realized there are a few paths I can take to gain access to dental school. Pushing myself and never giving up is one of the keys to my success. Talking with my mentor about my future has kept me determined to do well and keep going even through dealing with stress from tough courses.

Taking the advisor role a step further, it was evident in the statements that the mentor gives advice beyond the academic realm at the university. Specifically, some students talked about how their mentor has encouraged them to get involved on campus. One student stated, “My mentor has encouraged me to get involved on campus and we talked about which clubs

would be best for me to join. She has really helped me feel as though I am a student." Another student added, "My mentor is supportive of my involvement on campus [sic]." Another student declared, "I didn't need a mentor from an academic perspective but I needed some advice for what to do outside of class. My mentor helped me in that regard."

Other students stated that the mentor also provided them advice on navigating the university environment and culture, thus leading them to the ability to be successful. One student stated, "My mentor helped me figure out my housing and made it much easier for me to plan out my financial needs in order to live on campus." Another student also expressed how her mentor assisted her with issues related to living on campus, "…one thing my mentor really helped me with was figuring out my housing."

It is evident as well that the student mentee values a mentor who listens carefully. One student stated, "She [the mentor] has helped me with everything I've asked and always listens to any issues I may have." Another student discussed her appreciation in the attentiveness of her mentor:

> My mentor helped me out with some decision making process and also just helped me overall by listening to me talk about my issues. She [the mentor] has given me advice and been able to let me vent if I had any issues with school.

One-on-one interview.

Each of the students interviewed shared how their individual mentor had a positive impact on their student success. Mentees provided examples of how their mentors broaden their network at the university, assisted them in transitioning to the college environment, and provided

a support base in times of need. Following are some other specific examples of how the mentor had a positive impact on the mentees' student success.

Student A affirmed that her mentor had a positive effect on her ability to be successful since her mentor assisted her with finding housing. Student A states, "She had an effect [sic] a big effect on me for next year. She helped me figure out where I will be living next year."

Student B also had a positive experience with her mentor specifically when deciding on a major. Student B who initially came in with a nursing major ended up changing her major after talking to her mentor. Student B describes her discussion with her mentor and how it has enabled her to pick the right major:

> I came in and I was very unsure about what I wanted to major in. I was originally nursing and I wanted to do something in the medical field. I was originally nursing [sic] and I wasn't really sure if I wanted to stick with it. My first meeting with my mentor we talked about it. She took me through [sic], she walked me through different majors and the different classes I'd be taking. She pointed me in the right direction with who I should talk to if I wanted to switch my major and who I should speak to if I had questions on my plan of study or switching classes or stuff like that. She was really helpful in just providing me with initial information about my major. She's also been really helpful with providing me with resources.

Student H described how important his mentor was to him especially when the student first arrived to college. Student H stated, "My mentor didn't necessarily assist me with my academics, rather he was there to help me handle stress, how to order everything, how to set

reminders, and get all my work done." Student H added how this has enabled him to be successful as a student.

Ideal characteristics of mentors.

Although there was no specific question posed in the online questionnaire or through the one-on-one interview to ask what the ideal characteristics of a mentor, themes emerged describing the ideal mentor. Two major variables that emerged from the data that determined ideal characteristics of a mentor by a mentee were frequency and satisfaction of the mentor. Following are the two questions that enabled these variables to surface thus allowing the characteristics of an ideal mentor to emerge.

Questionnaire question: Do you believe the frequency (how often you meet) of your meetings with your mentor has had a positive impact on your ability to succeed as a student? Please explain.

Frequency refers to the amount of time a student mentee meets with their mentor in any given time frame. The student mentee participants in this study were asked via the online questionnaire how often they met with their assigned mentor. Figure 5 illustrates how often the student mentees who were surveyed met with their mentor. Although a majority of the student mentees met with their mentor less than once a month, 56% of them believed that the frequency of their meeting has had a positive impact on their abilities to be a successful student. A variety of responses were given when the students were asked to explain.

Online questionnaire.

A majority of the student participants who explained whether or not frequency had an effect on their ability to succeed as a student indicated that regardless their mentor provided them someone they could go to seek validation in decision making or seek out advice. One student explains, “My mentor has provided me with some guidance on how I should go about certain things and [the mentor] is my support system. When I am uncertain about something, I know I can come to my mentor for advice.” Another student states, “Even though I only met my mentor two times in my two terms so far, her advise has [had a] positive impact in my life.”

Advice and encouragement from the mentor is not limited to just the academic success of a student by goes beyond in providing the student mentees guidance in everyday life. A student mentee who has met with their mentor 2-3 times a month stated, “She gives me good advice on things I am struggling with in school and outside school.” Another student who also meets with their mentor 2-3 times a month stated that their mentor, who is also an ordained minister, has provided the student mentee spiritual guidance which has enabled him to be successful in life. Another student added, “I just feel that my mentor is there for a helping hand for anything I need.”

Statements like these were not limited to those who met with their mentor more than once a month. Some who did not even believe that frequency of meeting their mentor was a variable for student success indicated that a successful mentor-mentee relationship goes beyond just how often the two meet. One student who indicated that they only meet with their mentor less than once a month stated, “Whenever I meet with my mentor, it is like a checkpoint where I would reflect on what I did the past term and try to improve myself.”

Another student who did not believe that frequency was a factor in student success indicated that she would meet with her mentor more often if she could but scheduling conflicts permit her from doing so. She did state though, "As long as we meet a minimum of 1-2 times a quarter, I can focus on my work more…and catalog what I do between meetings."

One of the key factors that did resonate with the participant responses as it relates to frequency of meetings is the importance of flexibility and knowing that the mentor is there to meet with the mentee when needed. "Frequency has been a less important driver of my success than being able to have an ultra-accessible advisor", stated one student. Another student added, "When we can meet with each other less frequently, we have more to discuss and I feel allows us to build a better connection when we can have very in-depth and lengthy conversations when we do meet."

One-on-one interviews.

The one-on-one interviews were more revealing on the importance of frequency, specifically on how long each meeting lasted, what was discussed, and the method of meeting. Each of the seven interviewed student participants met with their mentors at least once a month. Each of them also met with their mentors for varying time lengths. Two of the students said they averaged 15-20 minutes per meeting, two others for 30 minutes, and the remaining three students met with their mentors for 60-90 minutes.

Flexibility and adaptability again seemed to be the one trait that the student mentees appreciated from their mentors because the students tend to have busy schedules. Student B stated, "She's [the mentor] always willing to meet with me and it's never a problem". Some of the students also stated that their mentors are even willing to meet with the mentors when they

are on co-op, which can be a challenging time for the mentors since the students typically do not get back to campus until after 5 p.m.

One interesting concept that came up in the one-on-one interviews was that some student mentees utilize technology to stay connected with their mentor. Student G emails their mentor on a regular basis, while Student I texts and even Skypes with their mentor. Three of the students also noted that they have met with their mentor outside of their mentor's office space and had gone to lunch or grabbed coffee while they were meeting. Each of these students indicated that they enjoyed the opportunity to move outside of the less structured space which allowed them to speak more freely about other things rather than just academics.

Questionnaire question: Are you satisfied with your relationship with your mentor? Please explain.

Overall when asked, 83% of the student mentees who participated in the online questionnaire stated that they were satisfied with their mentor. There are a variety of reasons why the student mentees indicated why they were satisfied with their mentor. The overarching reason is because student mentees believe they are matched well with mentors who share in interest in the success of their mentee as a student and as a person.

Online questionnaire.

One student states, "We understand each other and can relate to each other, despite us having busy schedules". Another student mentee shares how shared interests have enabled them to have a good relationship, "My mentor and I have bonded over movies we have watched, running and life experiences." Another student adds, "He [the mentor] is like a friend to me and I feel comfortable talking to him about issues involving my grades in [with] my family." Another

student stated, "…she [the mentor] is like a friend but at the same time my adviser. If I am ever stuck or need help, I will email her for help and advice."

One of the eleven students who stated that they were not satisfied with their relationship with their mentor wished they had more in common so their bond would be stronger. The student states, "We just talk about how the term is going and have nothing in common, so it isn't really impacting me." Another student who felt that they did not have a good relationship with their mentor stated, "I think there needs to be a better process to match students with mentors. It is difficult to be forced to meet with someone when there is little to nothing in common."

The mentor's flexibility and time to meet is another major theme once again emerged as it relates to a positive relationship between the mentor and student mentee. One student states, "My mentor is convenient and easily available to me." Another student adds, "My mentor is a great person who I know if I had a problem I could go straight to her." One student summarizes the importance of his mentor's flexibility and how that has created a positive relationship with his mentor and ultimately has enabled him to be successful as a student:

> My mentor has given me advice and has been available whenever I have needed him. I appreciate that he answers emails quickly and is available to meet when it is convenient for the both of us. He has done an excellent job of keeping me on track and reminding me of what is necessary to achieve my academic goals.

Similarly, students who were not satisfied specifically mentioned how they wish their mentor was more flexible and had more time. One student states, "If we had been able to meet more often and build a stronger bond, it may have been a more positive experience." Another student discusses how her mentor likes her mentor but does not see her enough. She states, "It is

incredibly hard to even have a phone conversation with her. She is constantly busy with work and family."

One more reason why student mentees who were not satisfied with their relationship with their mentor indicated it was because their mentor lacked knowledge in the student mentee's field of study. One student stated, "My mentor is really nice and sweet however, she doesn't understand anything in the medical field." Another student adds, "Her [the mentor] department is not involved with what I am studying at all which causes a bit of a disconnect [sic] for us in an academic mentor relationship."

One-on-one interviews.

The one-on-one interviews supported what was revealed in the online questionnaire data specifically as it related to flexibility when this question was asked. Student B shared how she can easily go to her mentor to seek the assistance when needed. Student B states, "She's always willing to meet with me and it's never a problem, so yeah I'm happy." Similarly, Student H shared how he admires the flexibility with his mentor and how that has enabled him to be successful as a student:

> One of the most important things I think a mentor should have is flexibility. Personally, I can say that my mentor who's very busy all the time, they can give you good advice on how to be successful, but I think it's more important that a mentor can help you whenever. I don't mean flexibility as in I can come in right now and talk to you. I mean flexibility as in I don't have to wait a week or two weeks before I can talk to you.

Results and Interpretations

The primary question of this study was to examine what is the impact of the mentorship program on the low SES student mentees at a four year urban university. Three secondary questions were established to guide the study and answer the primary question presented. Following are each secondary question presented with the researcher's null hypothesis, denoted by $H_{0,}$ and an alternate hypothesis, denoted by H_1, where applicable. In addition the researcher provides results based on the analysis and interpretations of the quantitative and qualitative data presented to support the argument.

Research Question One

How do the retention rates and GPAs differ from those low SES students participating in the mentorship program compared to those low SES students who do not participate in the mentorship program?

H_0: There is no significant difference between retention rates and GPAs of the low SES students participating in the mentorship program and low SES students not participating in the mentorship program.

H_1: There is a significant difference between retention rates and GPAs of low SES students participating in the mentorship program and low SES students not participating in the mentorship program.

This question has two parts and requires an analysis of two sets of data. First, the researcher analyzed the retention rates of the low SES student mentees and compared it to the university overall rate of retention as well as retention rates of students classified as low SES but

not part of the mentorship program. All this historical data was provided by the university. A simple comparison of these retention rates demonstrates that the low SES students who are part of the mentorship program have consistently higher retention rates (86%) than the overall university retention rate (85%) and the low SES students at the university that are not part of the mentorship program (75%). Therefore, the null hypothesis can be rejected and the alternate hypothesis is accepted.

Second, the results of the Independent Samples T-Test comparing the GPAs of the low SES students participating in the mentorship program (n=215) and a group of randomly selected low SES students who are not part of the program determined that there was no significant difference between the two groups. Based on this finding the null hypothesis can be accepted and the alternate hypothesis is rejected. Therefore, there is no significant difference between the GPAs of the low SES students participating in the program and GPAs of low SES students who are not part of the program.

Research Question Two

How does the frequency of the interactions between the mentor and mentee impact the GPAs, retention rates, and social engagement of the participating low SES students?

H_0: Frequency of interactions between the mentor and the mentee will not impact the GPAs, retention rates, and social engagement of the participating low SES students.

H_1: Frequency of interactions between the mentor and the mentee will impact the GPAs, retention rates, and social engagement of the participating low SES students.

This question also has multiple parts. First, quantitatively it can be determined that frequency may have an impact on student mentees GPAs. The Pearson's correlation results determined that there was a negative correlation to the student GPAs and it was statistically significant. However, the GPAs may not necessarily be the result of the amount of meetings a mentee and mentor meet rather it may be the reason why the student mentees are meeting more frequently with their mentor. Qualitatively it seemed that mentors can assist students with their academic success by providing the students with academic resources. In addition, it was indicated that experienced mentors tend to provide the mentees with good advice that may enhance the success of the student mentee in the classroom. Mentors can also serve as an academic advisor and it was indicated that the mentors share expertise when it comes to selecting classes, which ultimately may assist students with obtaining a higher GPA because of course load.

Second, the Pearson's correlation results indicated that the frequency of meetings between a mentor and mentee may impact retention rates. Success in the classroom leads to a higher GPA and ultimately may increase retention. Similar to the mentor having an effect on a student's GPA, the mentor may also have an impact on the student mentees ability to be retained. Quantitatively, although not statistically significant, there was a positive correlation between the frequency of meetings between the student mentee and their mentor and the student mentee's retention rate.

Qualitatively, the student mentees discussed how the mentor has contributed to the student's ability to be retained. Student mentees shared how a mentor can assist a student with making that transition from high school to college. In addition, student mentees shared how their mentors are resourceful. Based on the comments from the online questionnaire and one-on-one

interviews, mentors can assist student mentees in finding resources on campus as it relates to their academics, housing, and other offices. Student mentees also shared that their mentors are sometimes like a friend. Mentees shared how they can talk to their mentors about all types of issues and they are there for them to talk through these issues. Ultimately, these conversations happen when the mentees meet with their mentors.

Third, the Pearson's correlation results indicate that there is a positive correlation between the frequency of meeting between the mentor and mentee and the ability for the student mentee to be socially engaged. Again, the two tailed test indicated that there was no statistical significance. Qualitatively the students' responses support that the frequency of meetings with a mentor assist the students ability to be socially engaged. Specifically, students shared how their mentors have encouraged them to get involved on campus through a club or student organization, encourage them to volunteer, and assist them with networking.

As illustrated in Figure 5, a majority of the students who were interviewed tend to meet with their mentor less than once a month. Based on the comments in the interviews and online questionnaire it seems that most students meet with their mentors once or twice a term. The program requirement is for student mentees to meet once a term. It is difficult to answer the question presented because there are many other factors that may contribute to frequency. For one, the length of a meeting varies based off of the comments from the interview: Some meetings last 15-20 minutes while others meet with their mentor 60-90 minutes.

Ultimately frequency of the meetings between the student mentee and the mentor does have a negative impact on the students GPA. Therefore, the null hypothesis can be rejected and the alternate hypotheses can be accepted. It can be hypothesized, however, that those students

who have lower GPAs may be seeking the guidance and advice of their mentor to improve their grades.

In addition, although low, frequency does have a positive correlation on the student mentee's retention rates. Similarly, frequency has a low positive correlation on the students' social engagement. Based off of the quantitative data and supported by the qualitative data the null hypothesis can be rejected for these two variables as well. With that, the alternate hypothesis that frequency of interactions between the mentor and mentee can impact the retention rates and social engagement of the low SES student mentees can be accepted. It is evident in the comments gathered from the online questionnaire and the one-on-one interviews that the student mentees may not directly rely on their mentor to be retained and socially engaged but indirectly follow the advice of the mentor on how to be successful in the classroom and seek opportunities to be socially engaged.

Research Question Three

What are the primary factors of the mentoring relationship that impact the participating low SES student's success at the university?

Through the online questionnaire and the one-on-one interviews, several factors or characteristics were mentioned that describe the ideal relationship between the student mentee and the mentor that impact student mentees success at the university. Student mentees talked about how the mentor's ability to be flexible was important because issues may present themselves and a student mentee may need to talk to their mentor right away. Mentors who are resourceful also contribute to the student mentee's ability to succeed. Mentors can share information about specific instructional labs, tutors, and general advice about specific classes.

Mentors who are good listeners and provide advice are other ideal characteristics identified by student mentees.

Students also shared how mentors provide good advice, not just on academic issues, but general life. In addition, mentors can serve as a career coach and provide academic support themselves. Student mentees whose mentors were in the same college as the student mentee shared how that is an ideal situation as they can use their mentor to their advantage. Mentors also help student mentees navigate the university environment and culture. In addition, mentors encourage students to be involved outside the classroom by promoting involvement in a student organization, research activities, networking opportunities, and volunteerism. These comments support the notion that there are a number of factors that contribute to the student's ability to be successful at the university.

Summary

In this chapter, the researcher provided the findings, results, and interpretations of the study. Both qualitative and quantitative data collected and analyzed suggest that mentors do have an impact on different factors that contribute to and impact student success.

GPAs, retention rates and online questionnaire data was collected in Phase I and provided the researcher to examine and analyze historical quantitative data and a combination of qualitative and quantitative data from the students' responses. Evidence was provided that retention rates are higher for those low SES students who participate in the mentorship program than the overall university and low SES students who do not participate in the mentorship program. However, there was no evidence that the GPAs of the low SES students who are part of

the mentorship program are better than the low SES students who are not part of the mentorship program.

Although negative and positive, it was also determined by the quantitative data collected via the online questionnaire that frequency of meetings between the student mentee and the mentor does have an impact on the student mentees GPA, retention rates, and ability to be socially engaged. Generally, it was determined that meeting with the mentor once or twice a term was sufficient.

Phase II of the study allowed the researcher the ability to collect additional qualitative data through one-on-one interviews. This qualitative data along with the qualitative data collected in Phase I provided the ability for themes to emerge providing additional data to support the interpretations of this study. Ultimately, several primary factors of the mentoring relationship were identified that impact the student's success at the university. Chapter Five will allow the researcher to further interpret these results and formulate recommendations.

Chapter 5: Conclusions and Recommendations

Introduction

The purpose of this action research mixed methods case study was to identify the variables that contribute to the success of low socio-economic students (SES) in a mentorship program at a four year urban institution. In this study, the researcher utilized a mixed methods explanatory sequential design to collect data in two phases. In Phase I, archival quantitative data was gathered by the researcher through the collection of GPAs and retention rates utilizing an Honest Broker (HB) who is also the director of the mentorship program. The GPAs of the 215 student mentees participating in the program were compared to 215 random students who were not part of the mentorship program but met the same criteria of being considered low SES. In addition, an online questionnaire, which generated both quantitative and qualitative data, was launched in Phase I to 211 of the 215 student mentees participating in the mentorship program. Four students who participated in the focus study were eliminated from the online questionnaire. Of the 211 possible participants, 68 student mentees completed the online questionnaire. Utilizing SPSS, a statistical analysis software program, the researcher analyzed the quantitative data collected in Phase I.

In Phase II of the study, the researcher conducted one-on-one interviews via an online collaboration tool. Participants were solicited through the online questionnaire facilitated in Phase I of the study. Seven students participated in the one-on-one interviews. The researcher then utilized Nvivo©, a qualitative data analysis software program, to group and analyze the qualitative data collected from the online questionnaire in Phase I and the qualitative data from the one-on-one interviews in Phase II.

The primary question for the study was as follows: What is the impact of the mentorship program on the low SES student mentees at a four year urban university?

The secondary research sub-questions guides this study:

1. How do the retention rates and GPAs differ from those low SES students participating in the mentorship program compared to those low SES students who do not participate in the mentorship program?
2. How does the frequency of the interactions between the mentor and mentee impact the GPAs, retention rates, and social engagement of the participating low SES students?
3. What are the primary factors of the mentoring relationship that impact the participating low SES student's success at the university?

Following is a conclusion of the study utilizing the researcher's findings, results, and interpretations presented in Chapter Four. The researcher's answers to the study's questions are also presented. In addition, the researcher will offer solutions to the problem statement based on the results and interpretations with suggested recommendations for useful action and further research.

Conclusions

The purpose of this action research study was to understand the impact of a mentorship program on low SES students at a four year urban university. The sub-population of low SES students have historically had lower retention rates, GPAs, lower levels of social engagement, and overall student satisfaction at colleges and universities (Walpole, 2003). The university being studied implemented a program for low SES students where mentoring plays an essential role. Previous studies have indicated that mentoring can play an integral role in a student's

ability to succeed by assisting them academically and through social integration (Crisp & Cruz, 2009; Terrell, Hassell, & Duggar, 1992).

This study was designed to study the impact of a mentoring program on low SES students at a four year institution. The researcher sought to answer this question by comparing GPAs and retention rates of low SES students in the program versus low SES students who were not part of the program at the same university. In addition, the researcher sought to study how often the student mentee and the mentor met had an effect on the student mentee's GPA, retention rate, and social engagement at the university. Finally, the researcher sought what the primary factors were on the low SES students' success as it related to the mentoring relationship. Following is an examination of each question presented with the researcher's hypothesis, the method used and the data collected to answer the question, and ultimately the possible solution to the research question.

Retention Rates and GPAs

The first sub-question in this study was to examine the difference between GPAs and retention rates of the low SES students that are part of the mentoring program versus low SES students who are not part of the program. The researcher hypothesized that those students who are part of the mentoring program would have higher GPAs and higher retention rates that the low SES counterparts at the university that are not part of the program. As previously stated, a variety of studies have indicated that when a student identifies with a mentor at their university the student can have a higher GPA than those students who have not identified with a mentor (Campbell & Campbell, 1997; Crisp, 2010; Ross-Thomas & Bryant, 1994; Salintri, 2005; Wallace et al., 2000).

In order to answer this question, in Phase I of this study, the researcher collected historical quantitative data, specifically GPAs and retention rates of the low SES students who are part of the program and low SES students who are not part of the program. A simple comparison of the retention rates of the low SES students who are part of the program and the low SES students who are not of the program indicated that those low SES students who are part of the mentoring program do indeed have higher retention rates than their low SES counterparts who are not part of the mentoring program. The low SES students who are part of the mentoring program have an 86% retention rate compared to the low SES students who are not part of the program that have a 75% retention rate. Furthermore, it was discovered that the low SES students who are part of the mentoring program also have a slightly higher retention rate than the general student population at the university, which yield an 85% retention rate.

To examine the differences of GPAs between the low SES students who are part of the program utilizing the HB/director of the mentorship program to collect GPAs of the 215 low SES students who are part of the program and 215 randomly selected low SES students at the university who are not part of the program. The researcher conducted an Independent Samples T-Test to compare the two sets of data. The results indicated that there was no significant difference in the two sets of GPAs.

There were a variety of factors that can contribute to a student's ability to be retained and have higher GPAs at a university. A mentor is a key to providing any student the resources to be successful academically and therefore granting them the ability to be retained. Through the qualitative data collected, student mentees indicated that a mentor can support a student in their academic success by encouraging them to visit academic resource centers and assisting the students with their course selections. These activities facilitated by a mentor may be the reason

why these low SES students have higher retention rates than their low SES counterparts who are not part of the program.

Previous studies have indicated that students who have a mentor can have higher GPAs than students who do not have a mentor (Campbell & Campbell, 1997; Crisp, 2010; Ross-Thomas & Bryant, 1994; Salintri, 2005; Wallace et al., 2000). However, this study did not provide results that support this research. The GPAs of the low SES students that were randomly selected to be compared to the low SES students who are part of the mentoring program may have simply had higher GPAs. This hypothesis could be tested again in later studies by randomly selecting another group of GPAs from the low SES students who are not part of the mentoring program at the university.

Frequency of Meetings

The second sub-question in this study was to examine if frequency of the interactions between the mentor and the mentee impacted the low SES student mentee's GPAs, retention rates, and social engagement. The researcher hypothesized that the more often a mentor met with their mentor there would be an impact on the low SES student's GPA, retention rate, and social engagement. As previous stated studies demonstrated that the more often the mentee and mentor met, the more likely the student mentee was successful in achieving certain positive outcomes of the mentorship relationship (Bordes & Arredondo, 2005; Campbell & Campbell, 1997; Endo & Harple, 1982; Kuh & Hu, 2001; Pascarella & Terrenzinin, 1976).

In order to answer this question, the researcher utilized both quantitative and qualitative data in Phase I of the study. Through the facilitation of an online questionnaire, the researcher obtained quantitative data in asking how often a student mentee met with their mentor. Utilizing

a Likert scale on the online questionnaire, the student mentees indicated how often they met with their mentor with the following choices. In addition, in the online questionnaire, student mentees were asked if they believed their mentor had an impact on their ability to succeed academically (GPA), ability to be retained (retention rate), and ability to be socially engaged. Utilizing this quantitative data, a Pearson's correlation was then conducted to test if there was a correlation between how often the student mentee met with their mentor and the students' GPA, retention rate, and social engagement. To further support the results, open ended questions were asked of the student mentees on the online questionnaire to explain their answer. In addition, in Phase II of the study, select low SES students participated in a one-on-one interview. Through the one-on-one interview, the researcher had an opportunity to ask student mentees to expand on their thinking regarding whether or not the frequency of meetings had an impact on the student's GPA, retention rates, and ability to be socially engaged.

The Pearson correlation results indicated that that there was a statistically significant negative correlation between how often a student mentee met with their mentor and the low SES student mentees' GPA. Students who had lower GPAs met with their mentors more often. This may occur because these specific students are looking for the academic support to boost their GPA. Qualitative data collected suggested that mentors may not necessarily have a direct impact on a student's GPA, but may have an indirect impact because mentors serve as a second academic advisor. It was indicated that mentors share their own experiences when it comes to selecting classes and encourage student mentees to visit academic resources, thus allowing them to be academically successful.

The Pearson correlation results indicated that there was a positive correlation between how often a student mentee met with their mentor and the low SES student mentees' retention

rates. Through the qualitative data, the student mentees shared how their mentor can assist the student mentee with the transition from high school to college. In addition, it was indicated that mentors serve as a resource to student mentees in a variety of capacities, specifically by sharing academic resources on campus and student services offices, such as housing. Furthermore, mentors were described as a "friend." Mentees shared how they can talk to their mentors about all types of issues. The mentees felt comfortable that they have this opportunity to speak with a person who can be trusted and respected. Ultimately, the more often the student mentee meets with their mentor the more often these conversations can take place.

The Pearson correlation results indicated that there was also a positive correlation between how often a student mentee met with their mentor and the low SES student mentees' ability to be socially engaged at the university. The qualitative data indicated that the mentor encourages student mentees to get involved on campus by joining a student club or organization. In addition, mentors serve as a conduit to networking and encourage volunteering. Again, the more often a student mentee meets with their mentor, the more often these opportunities present themselves.

When it comes to frequency of meetings, there are many variables that can add to the success of their time together. Besides how often a student mentee and their mentor meet, the environment and atmosphere of where they meet, how often the meetings last, and whether or not the meeting is structured are other variables that affect the meeting. Some students indicated that they like meeting with their mentor 15-20 minutes, while other meet with their mentors up to 90 minutes. Students also indicated that they like to meet with their mentor outside of their office and prefer meeting at a coffee shop or like going to lunch. Students also indicated that they like

their meetings to not be structured with an agenda, rather a free flowing discussion where many different topics can be discussed.

A majority of the students who participated in the online questionnaire indicated that they like to meet with their mentor less than once a month. The program being studied requires that student mentees meet with their mentor at least once a term which is about every three months. The most important factor that came from the comments in the qualitative data was the mentors' ability to be flexible when it comes to meetings. Student mentees like the ability to pop in and see a mentor between classes, have the ability to text them on the phone, pick up the phone and call them, or shoot them an email. Flexibility is the most important factor when it comes to frequency of meetings.

Primary Factors of a Mentoring Relationship

The third sub-question in this study examined the primary factors of the mentoring relationship that impacted the student mentees' success at the university. As previously mentioned, there are many characteristics and factors of a mentoring relationship that can impact a student mentee's success at college (Crisp & Cruz, 2009). This study identified some specific characteristics that have impacted the low SES students participating in the mentoring program being studied.

As previously mentioned, flexibility is one factor that can contribute to a student's ability to succeed. Student mentees indicated that they value the ability to reach their mentor when needed and can do so through a variety of methods. Resourcefulness of the mentor is another major factor in an impactful relationship. Mentors can share academic resources on campus and

assist students in finding an office on campus. Mentors who have been on a campus for a few years can also assist a student in navigating a complex university environment and culture.

Good listeners are another important attribute that student mentees value in a mentor. Students indicated that they often will talk to their mentors as a friend and ask for advice on issues both academic and non-academic. Mentors who share common interest with their student mentees are also an important factor that can contribute to a successful relationship. Mentors also serve as a career coach and can provide academic advice themselves. Student mentees value the perspective mentors provide from their own experience when a student mentee is determining their own future plans. Ultimately, a mentor well matched with a mentee will have more of an impact on the student's success.

Recommendations

Recommendations for Practice

The following are recommendations based upon the findings, conclusion, and interpretations, of this study:

1. A system should be created and implemented to match student mentees to mentors based off of personal interests, academic interests, and/or career goals.
2. Specific criteria should be adhered by in the selection of mentors for the program, specifically general knowledge of the university and capability of being flexible to meet with the student mentee.
3. A guide should be created by the program director to assist the student mentee and the mentor to develop specific expectations for the relationship.

4. The program should have an expectation that the student mentee and the mentor should meet at least once a month or more during the academic year.
5. The program should host an event where all student mentees and mentors attend at least once a term.

Recommendations for Further Research

Results from this study indicated opportunities for further research to study the positive effects on the student mentee-mentor relationship. The following are some opportunities for further research on this topic:

1. Further analysis of the variables of the student mentee meetings with their mentor may determine the ideal structure and format of these meetings. Specifically examine the environment and atmosphere of where the meetings take place, how the meetings are structured, and how long the meetings actually last.
2. Further analysis of low SES students in the program who have lower GPAs may determine what the student mentee may be lacking from the relationship.
3. Interviewing mentors may determine key factors in a relationship that lead to the student mentee's success.
4. Interviewing low SES students who were part of the program who left the program may also determine what they lacked in the relationship that resulted in those students not being retained.
5. Facilitating an online survey and/or interview low SES students who are not part of the program and compare results from that study to this study.

Summary

In 2010, the university that served as a basis for this study implemented a mentorship program offering 50 low SES incoming first year students per year a renewable scholarship award that covered 100% of the student mentee's fees and tuition. Each student mentee is assigned a mentor and at the time of this study, 215 low SES students participated in the program. These students had higher retention rates than their counterpart low SES students who are not part of the program by almost 10%. The researcher sought to determine what factors contributed to the success of the program.

This study provides the evidence to support the mentorship program at an urban university. Through this study, it was found that student mentees who have participated in the program and have a positive relationship with their mentor could be successful at an urban university. Mentors primarily serve as a resource to the low SES student mentees and assist them in navigating at a complex university environment and culture. Mentors assist their mentees with academic advice and encourage social engagement. Mentors are flexible and provide the time for student mentees to meet with them. Mentors are good listeners and provide advice on all elements of a student mentee's life. These are all factors that have been determined to lead student's success at an urban university (Tinto, 1975). The quantitative and qualitative data collected in this study, through the online questionnaires and the seven one-on-one interviews, indicate that mentoring does have an impact on low-SES college student success.

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Appendix A

Email from Director of Program to Student Mentees

Dear (insert name of student),

In an effort to improve the Mentorship Program, my office is working with one of Program mentors, Associate Dean of Students, John Cooke, in collecting some information from you about your experience with your mentor. Below you will find a link to a quick questionnaire that will provide us some information to gauge how the mentee-mentor relationship is going. I request that you take a few minutes to give us your honest feedback about your experience. Questionnaires are anonymous and your name will not be associated with your responses. The questionnaire will be open until Monday, April 13, 2015.

In addition, we will be hosting one-on-one interviews to gather more information about your experience. The one-on-one interview session will last no longer than 30 minutes and will take place via BlackBoard Learn so your identity would be concealed. If you are willing and interested in participating in the one-on-one interview, please indicate this in the questionnaire where asked. After the questionnaire closes, we will be reaching out to some of you to participate in the one-on-one interview. We will email you to confirm your participation in the focus group no later than Tuesday, April 14, 2015.

Thank You

Director of Program

Appendix B

Mentee Online Questionnaire Questions

1. On average, how often have you met with your mentor a term?

- ☐ Less than once a month
- ☐ Once a month
- ☐ 2-3 times a month
- ☐ Once a week
- ☐ Never

2. Do you believe the frequency of your meetings with your mentor (how often you met) has had a positive impact on your ability to be successful as a student? Please explain.

- ☐ Yes
- ☐ No

3. Has your mentor had a positive effect on your success as a student overall? Please explain.

- ☐ Yes
- ☐ No

4. Do you believe the mentor has had an effect on your ability to be retained at the university? Please explain.

☐ Yes

☐ No

5. Do you believe the mentor has had a positive effect on your academic success (i.e. GPA) at the university? Please explain.

☐ Yes

☐ No

6. Do you believe the mentor has had an effect on your ability to be socially engaged (i.e. joining a student organization, being involved in community service, networking, etc.) at the university? Please explain.

☐ Yes

☐ No

7. Are you satisfied with your mentor? Please explain

☐ Yes

☐ No

8. Are you willing to take part in the one-on-one interview?

☐ YES ☐ No

Appendix C

Focus Group Script and Questions-Mentees

One-on-One Interview Script

"Thank you for taking the time out of your busy day to talk with me about your experience with your mentor. The session should last only 30 minutes, but we have the space for 60 minutes in case we go over. We will be talking about your experience with your mentor. Feel free to share any personal experiences as well as any other experiences you know that your fellow mentees have had with their mentor. Before we begin, I want to go over some ground rules:

- Your thoughts and stories are important. We want to hear from you.
- There is no right or wrong answers to any of the questions I ask.
- The answers to your questions will be used as part of the research associated with my dissertation.
- You have been assigned a letter to protect your identity.
- I will also be recording the session so we can catch every thought.
- Try to avoid using any names when sharing any stories.
- If at anytime you do not feel comfortable answering a question, you can let me know
- If at anytime you want to no longer be part of the interview/study, you can withdraw from it with no repercussions. All data up to that point relevant to your interview will not be used in the study.
- Any questions before we begin?"

Focus Group Questions

1. What effect has your mentor had on your college experience? Share specific examples.

2. What perceptions and assumptions did you have about the mentoring relationship when you were first assigned your mentor?
3. Do you believe your mentor has had an effect on your GPA? On your retention? Why or why not?
4. Do you believe that your mentor has aided you in your ability to be socially engaged at the university?
5. Based on your experience so far, what are some qualities that you think the ideal mentor should have as it relates to the mentorship program? Please share some examples.
6. How often do you meet with your mentor? Typically, how long did these meetings take place? What activities take place in those meetings?
7. Are you satisfied with the amount of meetings you have had with your mentor? What is the ideal amount of times a mentee should meet with their mentor?
8. What suggestions do you have that would improve the mentorship program?

Appendix D

Letter to participate in interview

Dear Liberty Scholar,

A few weeks ago, you participated in an online questionnaire facilitated by one of our mentors and volunteered to participate in a one-on-one interview with him to discuss more in detail your experience with your mentor.

To conceal your identity and to make the interview convenient, all interviews will be conducted in an online format via Blackboard Learn Collaborate. Each student will be assigned a letter for the interview. The interview itself should not last longer than 30 minutes, but you should block off an hour in case it goes over. All interviews will be recorded through the Blackboard Learn Collaborate software and you will need to have microphone (which may be built into your computer) to participate. Additional instructions on using Blackboard Learn Collaborate will be sent along with the email confirming your interview date and time.

Please take a minute to complete the Doodle Poll link below and select anytime that works with your schedule. We understand that next week is Finals Week and it may be difficult to find some time to complete this interview, but know that the researcher is willing to work with your schedule to accommodate the interview. If none of the proposed date/times work, please email me to let me know what dates and times in the next two weeks do work and we will work with your schedule to allow the interview to take place. When completing the Doodle Poll please include your first and last name so I can confirm your participation. Select all options that work with your schedule. Please respond with your availability by either completing the Doodle Poll or emailing me no later than Monday, June 8, 9 AM.

On Monday (June 8) afternoon, an email will be sent to you confirming your date and time for the interview as well as instructions for logging into Blackboard Learn.

Again, on behalf of the researcher and myself, we thank you for your time and participation in this process.

Thank You

Director of Program

Appendix E

Drexel UNIVERSITY
Liberty Scholars Program

February 16, 2015

Dear Institutional Review Board:

The intent of this letter is to inform you that I, as director of the Liberty Scholars Program, give Dr. Ken Mawritz, Principal Investigator, and Mr. John Cooke, Sub-Investigator, permission to conduct the research titled *A Case Study on the Impact of a Mentorship Program on Low Socioeconomic Status Students at a Four-Year Urban University* at Drexel University. This also serves as assurance that this school complies with requirements of the Family Education Rights and Privacy Act (FERPA) and the Protection of Pupil Rights Amendments and will ensure that these requirements are followed in the conduct of this research.

- Investigators have permission to conduct the following listed research activities as it relates to the focus of this study around the Liberty Scholars Program:
- Review of historical data and records of student mentees in the Liberty Scholars Program Conduct online questionnaires with the student mentees in the Liberty Scholar Program
- Facilitate one-on-one interviews with Liberty Scholar mentee-students who volunteer to participate in this study.

If you have any questions, please do not hesitate to contact me at 215.895.6709 or at njp38@drexel.edu

Sincerely,

Nick Perez
Director, Liberty Scholars Program
Student Financial & Registration Services
Enrollment Management & Student Success
Drexel University

3141 Chestnut Street, Philadelphia, PA 19104 | Tel: 215.895.6709 | Fax: 215.895.2939 | drexel.edu | njp38@drexel.edu

Appendix F

Drexel UNIVERSITY
Office of Research

APPROVAL OF PROTOCOL

March 10, 2015

Kenneth Mawritz, Ph.D
School of Education
Mailstop: Drexel University

Dear Dr. Mawritz:

On March 10, 2015 the IRB reviewed the following protocol:

Type of Review:	Initial
Title:	A case study on the impact of a mentorship program on low socioeconomic status students at a four-year urban university
Investigator:	Kenneth Mawritz, Ph.D
IRB ID:	1502003440
Funding:	Internal
Grant Title:	None
Grant ID:	None
IND, IDE or HDE:	None
Documents Reviewed:	HRP 211 Application Form, Proposal Transmittal Form, HRP 201 Contact Forms, Conflict of Interest Forms, HRP503 Template Protocol, HRP502 Consent Form, Data Collection Tools, Invitation to Participate, Recruitment material, and Proposal

According to 45 CFR 46, 110, this study is Approved Expedited Category 7. This study will enroll 210 subjects recruited from the Mentorship Program at Drexel University to complete questionnaires and participate in interviews.

The IRB approved the protocol from March 10, 2015 to March 9, 2016 inclusive.

Before January 23, 2016 which is 45 days prior to study closure, you are to submit a completed "Form: Continuing Review Progress Report (HRP-212) and required attachments to request continuing approval or closure.

If continuing review approval is not granted before the expiration date of March 9, 2016 approval of this protocol expires on that date.

Template Revision: June 13, 2014
1601 Cherry Street, 3 Parkway Building, Suite 10444, Philadelphia, PA 19102 | Tel: 215.255.7857 | Fax: 215.255.7874
HRPP@drexel.edu | drexel.edu/research

Attached is a stamped approved consent document. Use copies of this document to document consent.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

Teresa C Hinton
Member, Social and Behavioral IRB #3