

IDENTIFYING COLLEGE STUDENT SUCCESS:
THE ROLE OF FIRST YEAR SUCCESS COURSES AND PEER MENTORING

by

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DEDICATION

To my husband, Raymond Corella
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ABSTRACT

Student Success continues to be a topic of great interest in the Higher Education Literature. Fifty percent of those students who enter a four-year institution actually graduate and 25 % of first year students do not persist into their second year in college. First-year success courses and peer mentoring along with other programming strategies have been developed to improve retention and success for college students during their first-year of college. This study explored how college students from nine different institutions defined college student success. In addition, students from these institutions were surveyed to find out how and if first-year success courses and/or peer mentoring contribute to college student success. Follow-up interviews allowed for a deeper understanding of how first-year success courses and peer mentoring contribute to college student success. The study found a new comprehensive definition for college student success. Also, first-year success courses and peer mentoring do have positive relationships with college student success however, they also have some shortcomings that were identified in this study.

CHAPTER ONE: INTRODUCTION

Overview of Topic

Starting a college education does not guarantee that one will successfully complete it. Twenty-five percent of college students do not return after their first year in college (Ishler & Upcraft, 2005; Braxton, Hirschy & McClendon, 2004; Seidman, 2005; Upcraft, Gardner & Barefoot, 2005). Fifty percent of undergraduate students do not complete a baccalaureate degree once they have entered a university (Braxton, Hirschy, & McClendon, 2004; Seidman, 2005; Upcraft, Gardner & Barefoot, 2005). Knowing more about what supports undergraduates to advance from one year to the next, how to be successfully integrated into the social and academic life of the university, and earn a degree has been the focus of much research.

A number of studies seeking to identify predictors of success in college have pointed to students' secondary school achievement as measured by high SAT or ACT scores and GPAs (Kuh et al., 2005; Adelman, 2004; Barron et. al., 2001.; Pascarella & Terenzini 1991). Other studies have aimed to identify factors during college that contribute to success in college (Chickering & Gamson, 1987; Tinto, 1987; Astin, 1993; Cabrera, Nora & Castaneda, 1993; Shrader & Brown, 2008). These factors include: social and academic integration, student involvement/engagement, retention from the first to the second year of college, high GPAs, networking and graduation. In response to high rates of attrition; success programs and services (e.g. first-year success courses, summer bridge programs, peer mentoring etc.) have been developed over the years at many universities and colleges (Upcraft, Gardner & Barefoot, 2005).

In particular, peer-mentoring programs and first-year seminars or success courses, which I will describe more fully in the sections on success courses and mentoring, have been developed in recent years to address the success of college students (Upcraft, Gardner, & Barefoot, 2005). Despite the popularity of these programs and that hundreds of institutions have developed such programs, we know little about how the programs contribute to success, especially from the student's perspective. This study aimed to compare how these popular programs contribute to success across nine different universities. In order to understand how these two retention programs contribute to students success, we need to first understand how success is defined.

Defining Success in Higher Education

College student success does not have one clear definition in the research literature. There are a variety of factors that are known to contribute to college student success. Universities and colleges are continually seeking to find ways to ensure and improve student success. A majority of the literature focuses on student retention as the main indicator of success which is defined as "...the ability of a particular college or university to successfully graduate the students that initially enroll at the institution" (Seidman, 2005, pg. 3). Even retention has been interpreted in different ways, such as retention to the second year and retention to graduation. Another area of research has been on student departure in order to understand what makes students successful (Tinto, 1987; Braxton, McLendon & Hirschy, 2004; Padilla, 2009). Studies on student success have developed theories about what promotes student success in college. Tinto (1987) explained that in order for students to be successful they need to be academically and

socially integrated into the institution. If a student is not integrated into the institution in this way then they are more likely to leave the institution. Astin (1993) found that if students were involved in different opportunities on campus they were more likely to be successful. Therefore, there are multiple factors that contribute to student success and it cannot be limited to student retention. That is why it is important to identify other factors to student success and how students perceive success in college. Other measures of success have included high GPAs (Willingham, 1985; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006), integration into the university both academically and socially (Tinto, 1987), and student involvement/engagement (Astin, 1993; Chickering & Gamson, 1987; Kuh, Kinzie, Buckley, Bridges, Hayek, 2006; Padilla, 2009; Pascarella & Terenzini, 2005; Willingham, 1985).

Success Courses

First-year experience (FYE) success courses/seminars have also been developed to improve the retention of students from their first-year to their second-year (Barefoot & Keup, 2005). There are a variety of factors that influence a student's ability to continue in college after their first year including social and academic integration (Astin, 1993; Pascarella & Terenzini, 2005; Tinto, 1987). First-year experience programs have been developed over the years to aid in student retention, academic and social success (Schrader & Brown, 2008). Barefoot and Keup (2005) found that participation in a first-year seminar has positive effects on both social and academic experiences while in college such as academic performance, student involvement, and retention. Research, however, has not identified specific attributes of the success course that contribute to

student success. In addition, research has not shown what components of the success course contribute to student success from the perspective of the student. Mentoring programs, described next, have emerged as another way to support a student's overall success.

Mentoring

By overall success, I am referring to the success indicators described in the literature: persistence in the first year, persistence towards graduation, high GPAs, social and academic integration, student involvement and engagement. There is a large amount of mentoring research; however, most of the empirical studies are in business and organizational literature (Higgins & Kram, 2001; Budge, 2006; Jacobi, 1991). Mentoring is described in business settings as a way to help new employees in a new job transition and consists of opportunities for more experienced employees to mentor less experienced employees in order to help them learn about and move up in the organization.

Mentoring research in higher education institutions examines the experiences of graduate students with faculty mentors and less frequently focuses on faculty mentors for undergraduates (Budge 2006; Jacobi 1991). There is a lack of research on peer mentoring for undergraduate students in a university setting (Jacobi, 1991; Budge 2006). Mentoring by faculty and peers is utilized today in higher education as a retention model for undergraduate students (Jacobi, 1991; Budge 2006). In a review of the mentoring literature in education, Jacobi (1991) indicates the confusing and contradictory constructs surrounding mentoring in education. In addition, there is no universal definition for

mentoring which makes it problematic when various studies use different definitions of mentoring that sometimes conflict with each other (Jacobi, 1991; Budge, 2006).

Across existing studies, research has identified two common functions that mentors serve for mentees: psychosocial and career functions (Kram, 1985; Higgins & Kram, 2001). Psychosocial functions in the college context would refer to the personal and social development of students including increasing levels of competency, knowledge and skills to help them be successful in college. Career functions refer to the development of skills related to their career including mobility in or preparation for their job. However, research does not provide a clear understanding on how and if such mentoring functions contribute to student success (Budge, 2006; Jacobi, 1991).

Purpose of Study

Many institutions have embraced both first-year success courses and peer-mentoring programs to improve student success. These two models have been studied in isolation of each other; studies have not compared these two types of success services or reviewed them in combination with each other. In addition, peer-mentors have also been incorporated into first-year success seminars. However, the significance of peer-mentors in the first-year seminars has not been explored. This study examined both peer mentoring as part of first-year success courses and first-year success courses without a peer-mentoring component.

Institutions strive to improve academic excellence and retention of students to graduation. Therefore, student success is important to all universities and colleges. This study helped to understand how peer-mentoring and first-year success courses compare to

each other to influence student success. Understanding these effects can assist institutions of higher education in developing peer-mentoring and first-year success courses that are appropriate and effective in contributing to the success of their students. This study showed if college student success courses or peer-mentoring has a significant influence on overall student success. In addition, the study revealed a new definition for college student success from the perspective of the student.

This study informs the literature on student success by creating a new definition of what students believe contribute to their college student success. In addition, this study identified how and if peer-mentoring and first-year success courses influence student success and whether one of these two approaches has a stronger influence on improving student success. Through quantitative and qualitative research this study helped to understand which indicators of student success are influenced by peer-mentoring and first-year success courses from the students' perspective. The following questions were addressed in this study:

- How do college students define college student success
- How and to what extent does participation in a first-year success course influence college student success?
- How and to what extent does peer-mentoring influence college student success?
- How and to what extent do peer-mentoring and first-year student success courses compare with each other in their influence on college student success?

The answers to these questions can help institutions develop or modify programs with appropriate components for contributing to the success of their students. Through an online survey and interviews with college students at nine institutions, this study will help

to gain a better understanding of how first-year success courses and peer-mentoring have contributed to their success in college.

CHAPTER TWO: LITERATURE REVIEW

This literature review is comprised of three distinct areas: college student success, mentoring and the theoretical framework that will inform this study. I will begin with how college student success has been defined and measured and follow with the best-understood educational practices for student success and success theories. Then I will demonstrate the differences in success for first-year students and conclude with first-year success courses and how they can contribute to college student success. The second section focuses on mentoring by first defining mentoring, followed by the functions and benefits of mentoring. A review of the types of mentoring relationships and limitations on mentoring research will be explained. Finally, I will describe the theoretical framework that I will use for understanding mentoring and first-year success courses and how they may contribute to student success.

Defining Success and Success Models

The definition of student success can be varied based on the type of institution and its goals can be defined from the perspective of the institution or the student (Braxton, 2003; Willingham, 1985). According to Braxton (2003) there are three kinds of goals set by students that attend college including enrollment goals, social experience goals and academic experience goals. An enrollment goal is the reason the student is at the institution and this can be motivated by a variety of factors including obtaining a degree or preparing to transfer to another institution. Social experience goals can include developing friendships, leadership skills or balancing life responsibilities. Academic experience goals include doing well academically, acquiring subject knowledge or

developing critical thinking skills. Graduation from a university is one of the primary ways that institutions measure student success. However, students may leave an institution but that doesn't mean the student has not been successful. They may choose to attend another institution or their intention was to take only a few courses and not finish a degree.

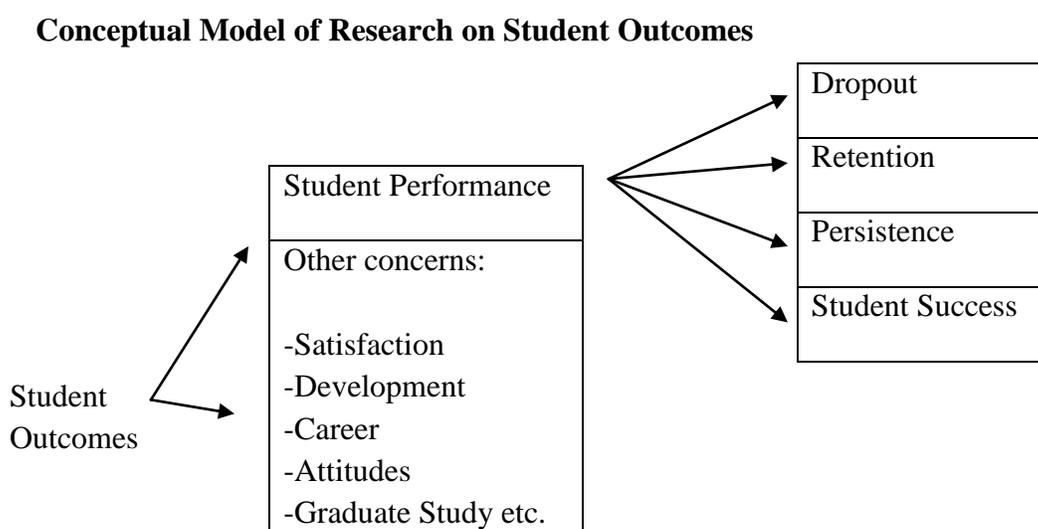
GPA is another common way success has been measured (Willingham, 1985; Kuh et. al., 2006). However, as previously mentioned there is a multitude of ways that success can be measured; using GPA as the only measure limits the ability to understand other aspects of success. There are a variety of ways to measure a student's success including: development of skills and competence related to career choice, intellectual growth over time, development of analytical and problem solving skills, obtaining admission to graduate or professional school, or awareness of social problems and moral issues (Willingham, 1985).

In addition, how well students do in high school can determine how well they do in college. First-year college grades are best predicted by academic performance in high school (Kuh et. al., 2006). Furthermore, "...the best predictor of college grades is the combination of an individual student's academic preparation, high school grades, aspirations and motivation" (Kuh et. al., 2006, pg. 31). A student's economic background, their parental education, and ethnicity all can affect a student's desire to attend college. College outreach programs assist with providing more access to students who are first-generation college students, low socioeconomic status or underrepresented minorities (Kuh et. al., 2006). Programs like GEAR UP (Gaining Early Awareness and

Readiness for Undergraduate Programs) and Upward Bound provide information to students and their families about how to prepare and apply for college, financial aid, and mentoring. These programs help to increase the likelihood that students from the backgrounds mentioned earlier will attend college and earn a bachelor's degree (Kuh et. al., 2006).

Padilla (2009) broadly describes success as "...an outcome of human interaction in complex educational systems, which in turn are embedded in complex social systems" (p. 1). Therefore, student success is one possible outcome of pursuing a higher education. According to Padilla, other student outcomes studied in the literature are related to student performance and include dropout, retention and persistence as well as other items such as student satisfaction, student development etc. Padilla (2009) uses figure one that is replicated below, to describe the research on student outcomes:

Figure 1



(Padilla, 2009, p. 2)

Padilla's model of research on student outcomes shows that the literature has studied student performance in four different ways including dropout, persistence, retention, and success. Therefore, success is considered to be a student outcome distinct from persistence and retention. One issue that I find with the way that Padilla presents his model of research on student outcomes is that retention, persistence and success are all listed as a student outcome however, retention and persistence are indicators of success. The overall outcome should be college student success and retention, persistence as well as other items such as academic performance should be referred to as measures of college student success. Padilla further explains that "A student is experiencing success when he or she is progressing satisfactorily through a program of study, and the student and others expect that the student will complete the program of study, resulting in either promotion to the next level or graduation" (Padilla, 2009, p. 4).

Through the research it is easy to recognize that student success can be identified by a variety of indicators such as, re-enrolling sophomore year, grades, how long it takes to complete the degree and graduate that are not always consistent throughout all of the literature. Other traditional ways of defining success include academic achievement (i.e. scores on standardized test), course grades in college, and earned credit hours over time, which all leads to progress towards obtaining a degree. Student success can also be determined by student development measures such as: developing communication, critical thinking, interpersonal or self-awareness (Kuh et. al., 2006). In their report Kuh et. al. (2006) describe student success as "...academic achievement, engagement in educationally purposeful activities, satisfaction, acquisition of desired knowledge, skills

and competencies, persistence, attainment of educational objectives, and postcollege performance” (pg. 7).

Yazedijan, Toews, Sevin & Purswell (2008) conducted a qualitative study exploring college students definition of success and found that there were three themes of success 1) grades, 2) social integration and 3) finding a balance in social and academic life. Yazedijan et. al., (2008) is one research study that demonstrates that from the perspective of the student, the definition of college student success is related to independence and responsibility. This study focused on college student success from the perspective of the student and it shows that their definition of success is different than other findings demonstrated in this literature review. Students’ definition has to do more with their development of independence and responsibility as well as academic performance, however, academic performance is not gauged based on how well they did but they are making academic progress. There are other studies that also find that that what matters in success is more than academic performance.

Kuh et. al. (2005) used a model to explain what they found to matter in student success. The model (figure 2) begins with several pre-college factors which are aptitude, college readiness, family and peer support, motivation to learn and demographics such as race, gender, and financial background that influence if they will be successful in their education. In addition, there are a few items that students must know how to navigate in their transitions to the college experience such as remediation in coursework and understanding the process to obtain financial aid. Therefore, Kuh et. al. (2006) suggests “If students are not able to successfully find their way through these screens, they may be

either temporarily or permanently separated from the college experience” (pg. 8). During the college experience the figure illustrates two distinct areas students’ behaviors and institutional conditions. In their diagram it is noted that students’ behaviors includes interaction with faculty and peers, the time they put into different tasks including academics and other involvement opportunities etc. Institutional conditions refer to resources, programs and policies that are in place by the institution. Between students’ behaviors and institutional conditions is student engagement. Institutional practices to support student engagement are essential in providing the opportunities for student-faculty interaction, collaborative learning, peer interactions which are all related to success indicators such as persistence, student development, obtaining a degree etc. (Chickering & Gamson, 1987; Kuh et al., 1991; Kuh et. al., 2006 Pascarella and Terenzini, 2005;). The final aspect of their model is the outcomes including grades and graduation and post-college outcomes such as graduate school and job opportunities.

Although this model put forth by Kuh et. al. (2006) seems to show a comprehensive understanding of student success, it neglects to explain which specific indicators of student success that institutional conditions such as first year experience, peer, and academic support programs enhance. Padilla’s (2009) model is slightly different than Kuh et. al.’s (2006) model. In Padilla’s model he shows student success as a possible outcome of college, and dependent upon student performance. In Kuh’s model they take a holistic approach identifying pre-college factors and how that may provide barriers for some students, then while they are in college what the student can do and what the institution can do to lead to success which then leads to postgraduate outcomes.

Kuh's model is more in line with the study that will be conducted because the largest component of the model is student engagement and whether the student chooses to become engaged in the institution and whether the institution offers the opportunities for the students that will allow for engagement.

Some research suggests that the single factor identified that contributes to student success while enrolled in college is student engagement (Kuh et al., 2005; Kuh, 2005; Pascarella & Terenzini, 1991). Student engagement refers to how students are connected to meaningful activities on campus in both academic and social ways (Kuh et al., 2005; Kuh, 2005; Astin 1991). Student engagement has two main components including the amount of time and effort that students put into the activities and how the institution provides resources and learning opportunities to encourage students to participate in such activities (Kuh et al., 2005). Therefore, engagement can be accomplished from two different perspectives, from the students' perspective and from the institutions' perspective.

Astin (1993) found that student involvement which is very similar to student engagement described by Kuh et al. (2006) contributes to college student success. Astin's model included inputs-environment-outputs. His model demonstrates that student outcomes are a function of the environment (outputs) they experience as a college student and their pre-college characteristics (inputs). Therefore, the interaction between the student's characteristics and environment can determine the outcome students who are more involved in purposeful activities are successful.

Best Practices to Foster Student Success

Kuh et al. (2005) identified five clusters that can help institutions implement effective educational practices to enhance opportunities for student engagement. These five clusters include “level of academic challenge, active and collaborative learning, student interactions with faculty, enriching educational practices, and a supportive campus environment (Kuh et al., 2005, p. 10).” Engaging in activities related to these clusters can lead to desired student outcomes in college such as group projects, peer tutoring, meetings with faculty outside of class, or internship experiences.(Kuh et. al., 2005).

Similar to the five clusters for effective educational practice, Chickering and Gamson (1987, 1999) developed seven principles of good practices in undergraduate education: (1) faculty student interaction, (2) opportunities for peer-interaction in cooperative settings, (3) opportunities for active learning, (4) providing regular feedback, (5) effective time management, (6) setting high expectations and (7) respecting diversity. These seven principles are ways to enhance student engagement, which can in turn lead to higher rates of success for college students (Chickering & Gamson, 1987). Chickering and Gamson (1987) share examples of ways that an institution can provide opportunities that support the seven principles of undergraduate education. These include services such as freshmen seminars, faculty mentors, peer mentors, peer tutors, team projects, or an orientation course. As these diverse opportunities demonstrate there is no one way to improve student success. An institution can use a variety of resources that will improve student success based on the needs of their students.

Kuh, Pace and Vesper (1997) conducted a study to test the best practices put forth by Chickering and Gamson. They used the College Student Exchange Questionnaire (CSEQ) which has been used to assess the quality of the college student experience. Pace identified clusters of three items of the good practices principles which were active learning, cooperation among students and faculty student interaction. They found that active learning and cooperation among students were the best predictors for desired student outcomes. In addition their findings showed that student-faculty interaction had positive outcomes for male students but not for females. In this study they were able to validate three of the seven principles.

Ullah and Wilson (2007) also wanted to understand the relationship between academic achievement and faculty-student and peer-interactions and student involvement/engagement. Academic achievement was measured in terms of the student's fall term GPA. Also, active involvement and faculty-student interaction seemed to have the greatest impact on student success. The peer effects were not as straightforward however. Gender plays a role when looking at academic success in relation to peer interactions. Male students' academic achievement decreased when they had positive peer relationships whereas, female student's that had positive peer relationships had an increase in academic achievement. Further research is needed to try and understand the differential effects male and female peer relationships have on student outcomes.

Student success theories

A majority of the research on student outcomes has focused on student departure or dropout (Padilla, 2009). Although, understanding why students leave can assist institutions in developing prevention programs, understanding what enables students to be successful can allow institutions to know how to support student success (Padilla, 2009).

Padilla's (2009) study is based on the Expertise Model of Student Success (EMSS) which is based on several assumptions. Assumption one is that it is unclear why one student enters college and graduates and another student enters college and doesn't graduate. The second assumption is that all students who enter college face some kind of barrier while in college. The third assumption states that students who are successful are able to overcome these barriers. The final assumption states that in order for a student to overcome barriers they must take some action. Therefore, the EMSS works from the perspective of understanding the barriers to success, the knowledge to overcome the barriers and the action that are used to overcome those barriers. From the EMSS the Local Student Success Model (LSSM) was developed (Padilla, 2009).

The data requirements for creating an LSSM are simple and straightforward: Identify the Campus barriers to success for a given student population; identify the heuristic knowledge that these students possess to overcome the barriers; and identify the actions that these students take to overcome the barriers (p. 28).

Padilla (2009) uses the LSSM to identify success strategies at different schools. This model can be obtained at any institution by surveying students at that institution to identify the barriers, the knowledge and the actions to put into place to overcome the

barriers at all levels of education from elementary to post-secondary institutions. The limitation of this model is that Padilla seems to suggest that you would need to take the time to identify barriers that the students indicate and then develop programs based on their challenges. This is a limitation because it takes time for a student to learn what their challenges are. Once you identify those challenges then you must develop programming that corresponds with their challenges and concerns. However, the question to be asked then is: Will every student class look the same if you do develop programming and maintain it over time? Will the students concerns change over time? Will you have to redesign support programming regularly to help them overcome their challenges?

Minority Student Success

Tierney expresses concerns with Tinto's model on student departure which says that students must be socially and academically integrated into the new culture in order to be successful. If students fully engage in academic and social integration as defined by Tinto, then they are assimilating into the new environment and "dissociating" from their past and/or culture. "Tinto's notion is that college initiates must undergo a form of cultural suicide, whereby they make a clean break from the communities and cultures in which they were raised and integrate and assimilate into the dominant culture of the colleges they attend" (Tierney, 1999, p. 82). Tierney suggests that rather than cultural suicide, cultural integrity must be maintained to increase the retention of students from underrepresented minority groups. One way to assist students from different backgrounds to be successful is to increase their cultural capital.

The notion of cultural capital, according to Bourdieu (1977a) is based on the assumption that cultural knowledge, skills and abilities are possessed and often inherited by certain groups in society. Distinctive cultural knowledge is transmitted through each of the families of each social class. As a consequence, children of upper-class families inherit substantially different skills, abilities, manners and styles of interaction and facility with language (Bourdieu, 1977b). Cultural capital, then, refers to a set of linguistic and cultural competencies individuals inherit because of their class, racial and gender identities.

(Tierney & Jun, 2001, p. 210)

Students who are first-generation college students, from low socioeconomic backgrounds or ethnic minorities do not have the same cultural capital as does the dominant culture in regards to college. For example, students may not be knowledgeable about the process of applying to college including things such as financial aid or the strategies to be a successful college student. This means that the students do not have the understanding of what the college culture is like including expectations of their experience of college and what to do while in college. As Tierney explains providing students with the cultural capital necessary to be prepared and ready to succeed in college will be essential. Although, it is important for students to become socially and academically integrated into the university environment it is also important that they maintain their cultural identity at the same time. This is possible if the institution shows commitment to students from underrepresented backgrounds such as American Indian, African American, or Hispanic students by providing them with the opportunity to promote and be involved in their culture while on campus. Becoming integrated into the campus and learning how the organizational system of the university works does not mean that the student has to perform 'cultural suicide' to be successful. Much of the

literature indicates that students who maintain their cultural identity are more successful in institutions of higher education.

One way to increase the cultural capital for underrepresented students is by identifying the barriers to success and what knowledge or cultural capital is needed to overcome these barriers. In their study, Padilla, Trevino, Gonzalez and Trevino (1997) use the Expertise Model of Student Success (EMSS) to develop a local model for minority students. The subjects of their study were sophomores, juniors and seniors who were Hispanic, African American, Asian American, and American Indian. The goal of the study was to identify the barriers the students faced, what knowledge they had to overcome the barriers and the action they put in place to be successful. Four barriers were identified by the students including: discontinuity, lack-of-nurturing, lack-of-presence and resource. Discontinuity barriers were described as preventing for a smooth transition from high school into college. The students knew that because that they would have challenges transitioning into a new environment without the same support that they had been receiving at home. Therefore they engaged in actions such as joining clubs with students from similar ethnic backgrounds, making their own decisions, and doing research on potential majors and careers. Students explained lack-of-nurturing as the institution not having resources available to them to help in their adjustment to college. They dealt with this barrier by creating opportunities for other types of support through peers and faculty members and participating in clubs and/or organizations. Students also identified the small number of minority students, faculty and staff as lack-of-presence barriers. To deal with this barrier, students became involved in ethnic study

organizations. Finally, resource barriers were in regards to finances and the ability to pay for college a cost of living expenses. Knowledge about the financial aid process and applying for financial aid enable students to have more resources available to them to pay for expenses. The use of the local model for minority students is in line with what Tierney (1999) idea of cultural integrity. Where students find a way to maintain their cultural identity and family connections rather than separate from their communities and integrate into the institution as Tinto suggests. However, not all students from ethnic minority backgrounds want or need to be a part of an ethnic organization. Therefore, as Tinto's theory may not be best used for all students the local model for minority student can't be used for all minority students because each student has a unique experience within their family and their culture.

It is important to understand what contributes to the success of students from underrepresented groups including ethnic minorities, first-generation college students and students from low socioeconomic backgrounds. Having a better understanding of success indicators for a variety of students will allow institutions to develop support programs and resources that will help improve the success of all students that enter higher education.

First-Year Success

About 25 percent of first-year students do not move on to their second-year at four-year universities (Ishel & Upcraft, 2005; Braxton, Hirschy & McClendon, 2004). Academic preparation, ability, and motivation are very important predictors in first-year student persistence. These predictors, however, do not provide a complete explanation for

why first-year students persist or leave college (Ishler & Upcraft, 2005; Kuh et. al., 2005; Adelman, 2004; Barron et. al., 2001; Pascarella & Terenzini, 1991). The greatest numbers of students leave after their first year in college (Upcraft, Gardner, & Barefoot, 2005; Tinto, 1987). Persistence to the second year is also based on the institution type. Those in 4-year institutions have a higher rate of persistence to the second year than those in 2-year community colleges (Ishler & Upcraft, 2005). In addition, the rate of persistence increases at more selective institutions. In the first year of college, students need to make academic, social and emotional adjustments. If students are not able to make the adjustments during their first year in college they are more unlikely to return for their second year or may have poor academic performance (Chickering & Gamson, 1987; Tinto, 1987; Kuh, et. al., 2006).

There are still however many challenges to success in the first-year experience including: not having a clear purpose of the first-year experience, low retention rates after the first year, first year is less challenging than students have expected, priority regarding first-year is not evident on all campuses, first-year initiatives are separate from other student support initiatives, sometimes there is more focus on retention rather than on student learning, and first-year initiatives are in competition with other university priorities (Upcraft et. al., 2005). A narrow definition of first-year student success includes successfully completing courses in the first year and continuing to enroll in the second year (Upcraft et. al, 2005). There are however, other items that can be included in first year student success including the development of intellectual and academic competence, developing interpersonal relationships, choosing a career path, staying

healthy, becoming responsible citizens, and becoming multi-culturally aware (Upcraft et. al., 2005). “In summary, first-year student success is more than earning a sufficient grade point average to make a successful transition to college and persist to graduation (Ishler & Upcraft, 2005, p. 10).”

There are also institution and environmental variables that can affect the persistence of a first-year student. These include things such as selectivity, size, racial composition, interaction with faculty, participation in extracurricular activities or financial aid (Chickering & Gamson, 1987; Tinto, 1987; Astin, 1993; Ishler & Upcraft, 2005; Kuh, et. al., 2006).

Over the last 20 years there has been an increasing interest in the first-year student experience and the development of first-year support services because of the low persistence rates from first to second year. These include first-year seminars, an increase in supplemental instruction, changes in the way academic advising and orientation is conducted, living learning communities in residence halls, and student support services that are directed towards first-year students (Upcraft, Gardner, & Barefoot, 2005). Additionally, research on the first-year student experience and student programs and services to support students has assisted in having a better understanding of first-year students and what contributes to their success in college (Upcraft et. al., 2005).

First-Year Seminars/Success Courses

First-year seminars are one of the strongest predictors of student persistence from first-year to the second-year (Ishler & Upcraft, 2005). Students who participate in first-year seminars are more likely to enroll in their second-year than those who do not

participate. The first-year seminar has been developed to assist students in their transition from high school to college with a focus on academic and social development. “A seminar, by definition, is a small discussion-based course in which students and their instructors exchange ideas and information (Hunter & Linder, 2005, p. 275).” First-year seminars are offered in a variety of ways including extended orientation, academic, specific topics, discipline-linked, or study skills. Students are able to earn for credit and use a letter grade for their evaluation of course work at some institutions. Instructors for first-year seminars can include, faculty, academic advisors, or undergraduate students who serve as co-instructors or peer leaders (Hunter & Linder, 2005). The objectives that institutions set for the first-year seminars can differ because each institution is addressing the needs of their students. Goals include helping to ease the transition to college, assisting with career planning, offering a supportive community through peer and faculty support, and developing academic and social skills.

First year success courses have helped to increase persistence into the second year of college as well as help ease the transition from high school to college. Research on first year success courses has also affected overall retention, grade point average, the number of credit hours students are completing, their involvement on campus, and their attitudes and perceptions of college (Hunter & Linder, 2005, p. 288). Keup and Barefoot (2005) found that participation in a first-year seminar has positive effects on both social and academic experiences while in college. Students are more likely to interact with faculty outside of class and attend class more regularly. “Course participants are more likely to report feeling integrated into the campus community and more successful at

various aspects of campus life” (Keup & Barefoot, 2005, pg. 36). First-year seminars are offered at over three-quarters of degree-granting institutions in the United States. However, there continues to be some who do not accept first-year seminar as an appropriate or legitimate course offering.

Some argue against first-year success courses because they believe that students should be prepared for the rigors of college and students should be able to transition on their own (Chaskes & Antonen, 2005). Faculty does not believe it is their role to teach students about first-year challenges and how to be a successful student. In addition, some feel that first-year success courses are a form of remediation that is not necessary at the college level.

Defining Mentoring

A clear definition of mentoring has not been identified throughout the literature. The one common description that is used in most of the literature is that a mentor is an older more experienced person in an organization who provides support to a mentee or protégé who is less experienced in a new organization (Kram, 1985). Budge (2002) indicated that one of the problems with the literature on mentoring is that there is not an operational definition of mentoring. The definitions are inconsistent and some definitions conflict with each other. Some definitions state that the mentor must be someone who is significantly older other definitions say that the mentor just needs to have more experience in the area. There are also different types of mentoring such as; formal, informal, traditional and non-traditional (Budge, 2002). “The result of this definitional vagueness is a continued lack of clarity about the antecedents, outcomes, characteristics,

and mediators of mentoring relationships despite a growing body of empirical research (Jacobi, 1991, p. 505).”

Also, the research does not provide a clear understanding on how and if mentoring contributes to academic success. Mentoring has been explored in three different fields’ education, psychology and organizations. Meriam (1983) as cited in Jacobi states the following:

The phenomenon of mentoring is not clearly conceptualized, leading to confusion as to just what is being measured or offered as an ingredient in success. Mentoring appears to mean one thing to developmental psychologists, another thing to business people, and a third thing to those in academic settings. (p. 506)

One of the conflicts in the definitions of mentoring relationships is that the mentor is much older than the mentee; however, there is a growth in interest in the role of peer mentors in higher education in which there is not a significant difference in age. They also indicate differences in the length of the relationship, some say it can be for a year and others indicate that they are longer.

Campbell and Campbell (2007) use other definitions as a foundation to come up with comprehensive definition of mentoring;

Building upon prior definitions, we use the term *mentoring* to refer to any situation in which a more-experienced member of an organization maintains a relationship with a less experienced, often new, member and provides information, support, and guidance for the purpose of enhancing the latter’s chances of organizational success. We refer here to the more-experienced member as a *mentor* and the less-experienced individual as a *protégé* or *mentee* (p. 136).

Peer mentors are usually students who have had more experience at the university and provide a new student with information and guidance on how to be a successful student.

“Organizational success” in higher education can be thought of as student success and the

indicators that have been discussed regarding student success. Empirical mentoring research is most prevalent in business settings. The next section describes how mentoring benefits mentees in an organizational setting.

Benefits/Functions of Mentoring

Most of the literature on mentoring is described in organizational or business settings, where more experienced employees in the organization mentor those who are less experienced or new to the organization (Kram, 1985; Higgins & Kram, 2001). Although, there is not one clear definition of what mentoring is; the research on mentoring indicates that it provides the opportunity to foster developmental relationships which can help serve both career and psychosocial functions (Kram, 1985). Career functions include career advancement or learning how to navigate one's way through the organization. Psychosocial functions include an increase in self-confidence and competence for the individual. Research in business settings shows that mentoring relationships provide assistance to mentees in career advancement as well as an increase in self-esteem and confidence (Kram, 1985; Higgins & Kram 2001). Mentoring programs in higher education have been created in an effort to increase student retention. In higher education settings mentoring programs have also been utilized to bridge a gap for students who are underprepared for college. Peer mentoring for undergraduate students has helped with psychosocial factors such as; increasing a student's self-esteem and time-management. It also assists with future career choices and the achievement of their educational goals. In such ways, in higher education mentoring has similar functions as it does in a business setting.

Mentoring can provide protégés/mentees with three types of support as cited in Ortiz-Walters & Gilson (2005). These include 1) psychosocial support 2) instrumental support and 3) networking support. The mentor provides their mentee with social support and shows them respect as they develop into their professional roles and also shares their personal experiences to help the mentee learn how to adjust. Instrumental support provides mentees with the opportunity to develop the necessary skills related to their career and academics. Finally, mentors introduce their mentees to colleagues and others in the field. Instrumental and networking support are equivalent to what Kram (1985) identifies in a business setting as career functions.

Types of mentoring relationships

Budge indicates (2006) “Typically, traditional mentoring in higher education has included faculty and staff members who provide mostly informal mentoring to graduate students in the university setting” (p.75). Also, a traditional mentoring relationship is where there is a single mentoring relationship between a mentor and a mentee.

Higgins and Kram (2001), suggest a new, more in depth way to view the developmental relationships that occur in mentoring relationships; they describe it as “a multiple developmental relationship phenomenon” (p. 264). They address two questions in their article: 1) Who is providing these types of support and 2) How is this support provided? In the developmental network experience, Higgins and Kram, identify four central ideas: the network itself, the relationships that make up the network for the individual, the strength and the makeup of the relationships. This view uses social network theory in the research on mentoring. Social networks will be discussed in the

theoretical framework. The individual's developmental network is made up of those individual's that the protégé identifies as supporting them in their career development. These relationships that can occur at the same time are a subset of the individual's entire social network. Developmental network diversity refers to number of different connections in the network and the extent to which those in the network know each other. Relationship strength refers to the "level of emotional affect, reciprocity, and frequency of communication" (p. 206).

The authors identify four "developmental network typologies"; 1) entrepreneurial, 2) opportunistic, 3) traditional and 4) receptive (Higgins & Kram, 2001). These four typologies differ by levels of relationship strength and relationship diversity. Entrepreneurial have high diversity and high strength, opportunistic has high diversity and low strength, traditional has low diversity and high strength and receptive has low diversity and low strength. Based on the different levels of strength and diversity, they describe the following propositions. Those individuals with entrepreneurial developmental networks are more likely to engage in a career change and to make decisions based on the advice they have been given by members of their network. Traditional and entrepreneurial developmental networks can help improve personal learning which includes clarity of personal values and professional identity. Traditional developmental networks are more likely to be committed to the organization. This means their beliefs and values are in alignment with the organization. Traditional or entrepreneurial experience higher levels of work satisfaction than receptive or opportunistic. This new way to look at mentoring relationships provides a deeper level at

how multiple mentoring relationships can contribute to psychosocial and career functions.

Another form of mentoring relationships is a peer relationship (Kram, 1985). Peer relationships can also support career and psychosocial functions. Information sharing allows a peer to provide information to help them get their job done. They can also help in discussing career options or solving problems and can provide feedback in relation to their own experiences. In terms of psychosocial functions peers provide support emotionally. They can have a friendship that is supportive and can share values, perceptions and/or beliefs. Although, peer relationships are similar to mentoring within a business setting, they offer other unique attributes. Peers are more on an equal level, and they tend to last longer than a hierarchical mentor relationship. “Relationships with peers can provide a variety of developmental functions, can endure significantly longer than mentor relationships, can be more readily accessible, and can develop a sense of mutuality, expertise, and connectedness (p.137).” Research shows that students involved in mentoring programs are more satisfied with their college experience than those who are not in mentoring programs (Budge, 2006).

Mentoring can also be described as informal and formal. Informal mentoring are relationships that just form while formal mentoring relationships are when a mentor is assigned to a mentee and a mentor goes through training (Budge, 2006). “The assumption in these studies is that when pairs are matched by gender or ethnic background, the result will be better communication and a closer, more effective

relationship (Campbell & Campbell, 2007, p. 138)". Studies show mixed results in regards to gender or ethnicity matching between the mentor and mentee.

Research on mentoring in higher education is more often focused on faculty as mentors for graduate students. Rose (2003) utilizes the *Ideal Mentor Scale (IMS)* to determine graduate students preferences and perceptions of what a mentor should be. The IMS is designed to measure on a scale of 1-5 the importance of attributes and behaviors of a mentor. In her findings, she showed that the relationship between the mentor and mentee was related to student satisfaction which Campbell and Campbell (2007) suggest may extend to undergraduates.

Peer mentoring program at universities can potentially helps to increase student involvement for the mentor and their mentee (Sanches, Bauer, & Paronto, 2008, p. 26)." There have been a few studies that have looked at peer-mentoring in higher education. Both studies have focused on student satisfaction as contributing to student success. Sanchez, R.J., Bauer, T.N., & Paronto, M.E.(2008) utilize the theory of reasoned action (TRA) to explain students' decisions and behavioral outcomes based on their experiences with their peer mentor. In their study Sanchez, R.J., Bauer, T.N., & Parnoto, M.E. (2008) evaluate mentoring in terms of a student's intention to continue in the university. In their study they found that peer-mentored students were more satisfied with their university than non-mentored students during the semester and after the semester that they were mentored. They also found that the quality of mentoring was related to their satisfaction however, they found mixed results in terms of commitment towards graduation.

Terrion & Leonard (2007) explored characteristics of peer mentors to determine whether the characteristics of the peer mentor had any influence on the mentoring relationship. Terrion & Leonard (2007) found that there are peer mentoring characteristics that contribute to the career and psychosocial function of peer mentoring relationships. The characteristics related to improvement of the career function includes the mentors primary program of study and their motivation for personal learning. Mentors who had these characteristics are more likely to help students with their career development. The characteristics identified that helped mentees with the psychosocial function included communication skills; supportiveness; trustworthiness; interdependent attitude to mentoring, mentee, and program staff; empathy; personality match with mentee; enthusiasm; and flexibility. Peer mentors with these characteristics helped support and motivate their students in personal and social development.

Walker & Taub (2001) were looking to see if having one mentor versus a network of mentors had an effect on the satisfaction of the mentee. The study did not show any difference of satisfaction on their mentoring relationship. Mentees' satisfaction however was related to how often they interacted with their mentor or mentor networks. Those who had more contact were more satisfied with the relationship, found the relationship more helpful in their development and were likely to stay in contact after the program was over.

Limitations of Mentoring Research

Budge (2006) concludes that there are more questions that need to be addressed such as; 1) what frequency does informal mentoring occur in higher education? 2) How

and to what degree does mentoring contribute to academic success? 3) What mentoring tasks are more significant in academic achievement? This study will address questions about how and to what extent mentoring contributes to success specifically from the perspective of the student. This is something that has not been looked at and is important to understand how mentoring contributes to the success of the student.

There is limited research that identifies specifically why or how mentoring contributes to student success. Research on mentoring does not focus on what factors or functions of a mentoring relationship accounts for the success of the student. Mentoring at the graduate level seems to be more available than at the undergraduate level in both informal and formal ways (Jacobi, 1991). Jacobi (1991) indicates that there are quite a few mentoring programs in post-secondary institutions in the literature that have been created to improve success. However, a majority of the studies have methodological problems and do not identify the factors within mentoring that attribute to retention. Where research on mentoring fails is when data is only collected at one time with a small sample and does not control for possible confounding variables (Jacobi, 1991).

The literature on mentoring is fairly diverse. The research shows that mentoring is associated with positive outcomes for protégés across business and educational settings. Research however does not address how the mentoring relationship influences student success more specifically which indicators of student success it influences. Understanding the perceptions of mentees regarding their relationship with their peer mentor and how that influences their success will further contribute to the understanding of how to match peer mentors with mentees to have an optimally successful experience.

This study will help in understanding how peer mentors can influence first-year student success from the student's perspective.

Theoretical Framework

There are many theories that have been derived to explain student success and student dropout. My study will focus on the following theories: Tinto's Interactionist Theory or Theory of Student Departure, Astin's Student Involvement Theory and Social Network Theory.

A Theory of Student Departure: Vincent Tinto

In creating his theory of student departure Tinto draws on what Van Gennep calls the rites of passage (Tinto, 1987). Van Gennep studied the movement of groups into other societies and found that there are stages in the rites of passage that help the individual(s) interact with the new society. These stages include separation, transition and incorporation. Tinto draws on the same three stages to develop his theory of student departure. Separation refers to entering college and leaving social groups behind and everything that the student was connected to prior to entering college. The next stage is transition. This stage refers to the transition from high school to college. Students are faced with the challenge of transitioning into a new environment with a new set of rules and academic standards. In addition, they are faced with much more freedom and opportunities for making decisions on their own. This is a very big change from their previous environment and experiences in high school. The final stage is incorporation. In this stage students are integrated into the university through social and academic means. This means they learn how to navigate the university system and are familiar with the

rules as well as having social connections either through faculty, peers or organizations that have helped them to social integrate into the institution. Tinto uses Van Gennep's rites of passage stages to begin the development of student departure theory.

This model of student departure describe the process of persistence as one in which the student moves through different states and is disconnected from their past associations to then form new social and intellectual communities in college (Tinto, 1987, p. 126). Tinto explains that departure is dependent on the student's disposition as well as the institution's opportunities for students to become integrated both socially and academically. Therefore, if a student cannot remove or distance themselves from their family and come into the institution and accept the values of the institution then they are more likely to leave that institution.

Tinto (1987) suggests that social and academic integration are ways that a student can adjust to college life. The components of social integration include student's interaction with faculty, relationships with peers and experiences outside of the classroom such as clubs and organizations. Social integration is further broken into two categories distinguished as formal and informal. Formal social integration is defined as specific interaction with faculty and/or staff at the institution and informal social integration is interaction with peers.

Academic integration refers to a student's cumulative GPA and intellectual development. Additionally, academic integration can include a student's involvement in academic experiences in class and outside of class. Being academically successful is also an aspect of academic integration. Both social and academic integration will lead to

institutional commitment and the final goal of graduating with a degree (Tinto, 1987). These commitments will increase the chances that a student will persist and eventually graduate.

If the student's intentions are to graduate then they are more likely to complete their degree. A student's willingness to achieve their goals and obtain a degree is more likely to finish their degree and someone who is not committed to completing their degree is more likely to leave the institution. Institutional commitment also has an impact on student persistence. The higher a student's institutional commitment the more likely they are to complete their degree. Although, both goal and institutional commitment of the student can influence their persistence it is often the things that happen to a student after they enter college that contribute to a student's decision to leave an institution. There are four terms that are used to describe student departure *adjustment, difficulty, incongruence and isolation*. Students must adjust to college both through social and intellectual means. They are adjusting to a new social environment one that includes having more independence and making new friends. This can be a very difficult adjustment for students leaving their family and friends and coming into a brand new environment including new living arrangements. In addition, they are in a very different academic environment where they have much more independence in choosing classes and deciding whether to attend class and the academic demands are much different from high school. For many students this adjustment can be very challenging. For some students they decide to withdraw within the first six or eight weeks of school because they are unable to learn how to navigate the university system and also socially

adjust to the new environment. Students can also have academic difficulty transitioning into a university and may not do well enough to be able to continue and are disqualified from the institution because of poor academic performance. Those students who lack academic preparation for college have a much more difficult time adjusting to the higher academic expectations. Another way that students are retained is the level of which they are integrated both socially and academically into the institution. If there is a lack of integration then either incongruence or isolation occurs. “Incongruence refers to that state where individuals perceive themselves as being substantially at odds with the institution. Isolation, however, refers to the absence of sufficient interactions whereby integration may be achieved”(Tinto, 1987, pg. 53). Both incongruence and isolation can lead to student departure from the institution. When students feel like their interests or needs are not matched with the institutions they make the decision to leave the institution. The incongruence can arise for a variety of reasons including a mismatch between their skills and abilities academically or lack of integration into the social system. If students’ expectations do not match their experiences when they attend college it can also affect their decision to stay in college or their academic success.

Individual isolation arises from the student’s inability to connect with social communities in the institution. “That social isolation is often a primary cause of voluntary withdrawal leads us to a deeper appreciation of the often-cited fact that withdrawal from institutions of higher education is most frequent in the first semester of the freshmen year.” (pg. 68)

There are differences in the way students leave based on a variety of factors including gender, age, ethnicity and socioeconomic status. The reasons why students leave also varies based on the type of institution they attend.

This theory works well for my study because peer-mentoring and first-year success courses are created to help students learn how to engage in opportunities to interact with faculty, get involved in programs and clubs, and gain experience through internships and research assistantships. This is related to the social integration of a student, although, Tinto initially says that students need to leave behind their connection to their previous culture and integrate, he does talk more specifically about the social ties to the institution which doesn't necessarily mean that they give up their cultural identity. In addition, both peer-mentoring and first-year success courses are developed to enhance the students' ability to modify their study habits and become more academically integrated by learning their own study styles and how to develop strategies that will make them academically successful. I believe Tinto's interactionalist theory is directly related to why and how peer-mentoring and first-year success programs have been developed. There is a limitation to his framework because it is not a one size fits all theory. Students from different backgrounds may need different kinds of support to be successful.

A Theory of Student Involvement: Alexander Astin

While Tinto's theory focuses on student departure, Astin focuses on how student involvement contributes to student success. Astin (1993) conducted a survey at four-year colleges which included about 25,000 students. He studied how student involvement affects student retention. "Basically, student involvement reflects the amount of physical

and psychological time and energy the student invests in the educational process”(p. 2). The definition of student involvement seems similar to that of Tinto’s academic integration. From the survey of students Astin found that academic involvement including taking honors courses, college internships and taking exams greatly impacted student learning and personal development. Interaction with peers has strong effects on academic development as well as cultural awareness and problem solving skills. Faculty members are the most important of a student’s development and the amount of interaction effects student development as well. Astin’s study supports the idea that social and academic integration assists in the persistence of college students.

In addition, the effectiveness of involvement is related to how much opportunity is available at an institution to allow for student involvement. Therefore, the institution provides the opportunities and then it is the students’ responsibility to engage in these opportunities that are available. The level of growth and development also lies in the hand of the student dependent on how much time and effort they put into being involved in their institution either socially or academically.

Both Astin’s and Tinto’s theories have something in common regarding the students engagement in the university. This engagement can assist students in being successful and this engagement allows for an increase in student persistence. Relationships with peers, faculty, and family also are also an important factor in contributing to student success in college (Kuh et. al., 2006).

As the research shows there is not a clear understanding of how first-year success courses and peer-mentoring contribute to student success. Studies have not been

conducted to understand the student's perspective regarding these two types of support services. In addition, limited research has demonstrated how students define success. A variety of theories have been used to understand what students need to do while in college to be successful. These theories include Astin's involvement theory and Tinto's theory of student departure. First-year success courses and peer-mentoring programs can provide students with the opportunities for social/academic integration and student involvement/engagement. This study will help us explore how students perceive that these types of support programs are assisting them in what they perceive to their success while in college.

These frameworks will help identify the means toward success which is student engagement. First-year success courses and peer mentoring are forms of engagement. Therefore, we want to understand what aspects of success courses and peer mentor programs as forms of engagement contribute to success. The research identified that first year success courses and/or peer mentor helped them to become engaged to achieve the different indicators of success that are identified by students.

CHAPTER THREE: METHODOLOGY

Introduction

The primary goal of this study was to test the research questions related to defining college student success and how first-year success courses and peer mentoring influence college student success. An online survey and follow-up interview questions were used to measure the variables associated with the research questions. The methodology that was used is presented in this chapter. This chapter is organized into 7 sections 1) research design 2) selection of participants/sample, 3) pilot study/instrumentation, 4) data collection, 5) data analysis, 6) positionality, and 7) limitations.

Research Design

This study used mixed methods to define college student success and identified the outcomes of peer mentoring and first-year success courses from the students' perspective. This study was conducted at nine different institutions in the United States that offered a first-year success course. A majority of the first-year courses offered at the nine institutions also had a peer mentor component. This research study was conducted to answer the following research questions:

- How do college students define college student success?
- How and to what extent does peer-mentoring influence college student success?
- How and to what extent does participation in a first-year success course influence college student success?
- How and to what extent do peer-mentoring and first-year student success courses compare with each other in their influence on college student success?

Mixed methods were used to investigate the four research questions. The study used an online survey to measure college student success related to first-year success courses and peer mentoring. Utilization of a survey allowed the researcher to gather quantitative information related to trends, attitudes or opinions from a sample that represented a population (Creswell, 2003). Therefore, a survey allowed for the possibility of generalizability to a population (Creswell, 2003). An online survey allowed the researcher to obtain responses in a fairly quick time frame and transfer the data directly into a database rather than taking extra time to directly input the information manually into a database. This provided efficiency and accuracy in the data input because it is transferred directly from the online survey into the database and statistical package. Follow-up phone interviews were conducted in order to have a deeper understanding of the influence of first-year success courses and peer mentoring on college student success. Qualitative analysis allowed for further interpretation rather than just numbers for the quantitative analysis. It helped to further understand what the numbers meant and explained any outliers in the quantitative data (Creswell, 2003).

For the first research question, “How do college students define success” descriptive statistics were used to determine the frequency in which participants chose their top five definitions of college student success out of a list of seventeen choices. Further explanation of the seventeen definitions of college student success can be found in the instrumentation section of this chapter. The other three research questions regarding how first-year success courses and peer mentoring influence college student success were explored with a variety of statistical analyses including, frequencies, means,

cross tabulations, correlations and regressions along with the information gathered from the qualitative analysis. The statistical analysis of these questions will be explained in detail in the data analysis section of this chapter.

Selection of Participants/Sample

In order to identify institutions to participate in this study, an email was sent to the First Year Experience Discussion List. This listserv is comprised of institutions interested in the first year experience. The email asked for institutions that had a first-year success course that included a peer mentor program as well as institutions with a first year success course by itself. Twenty-seven universities were identified from this email request. All institutions were in the United States and had a first-year success course with and without a peer mentor component. Nine of the twenty-seven institutions meeting these criteria agreed to participate in the research study. The schools were located in various regions of the United States; one from the southwest, two from the mid-west, one from the northeast, one from the west and four from the south. The number of participants from each institution varied as well as the type of institution in both categories of research versus non-research and public versus private.

Table 3.0 provides more information about each institution.

Table 3.0 Information Regarding Participating Institutions

University	Type of Institution	Enrollment Number	Public or Private	N
Mid-Western Public University Two (MWPU2)	research	27829	public	85
Mid-Western Public University One (MWPU1)	non-research	13558	public	47
Western Private University (WPR)	research	34347	private	192
Southern Public University Four (SPU4)	non-research	7021	public	49
Southern Private University One (SPR)	non-research	2547	private	16
Southwestern Public University (SWPU)	research	36932	public	14
Southern Public University Two (SPU2)	non-research	5205	public	10
Southern Public University Three (SPU3)	non-research	4370	public	12
North Eastern Private University (NEPR)	non-research	2877	private	10

Participants included students who were enrolled in and completed a first-year success course in fall 2008, during their first semester in college. In addition, there were participants who had a peer mentor and those who did not as a component of their first-year success course. A peer mentor was a student who was an upper-classmen at the institution. The peer mentor either attended the class that the mentee was enrolled in and meets with the student outside of class or he/she were just present in the course providing additional information to students during the in-class discussions. In general peer

mentors are usually selected through an application process and trained before they begin working with students in a first-year success course.

Although there were specific criteria in order to recruit participants to do the study, convenience sampling was used because the sample was based on whichever institution was willing to participate at the time and whichever students decided to participate (Lunenberg & Irby, 2008). Table 3.1 provides data for the entire sample who completed the online survey and includes demographic data and information related to their first-year success course and peer mentors.

Table 3.1 Demographic Data of Online Survey
Participants

(N=450)		
Characteristic	N	%
<i>Gender</i>		
Male	79	17.6%
Female	328	72.9%
Missing	43	9.6%
<i>Ethnicity</i>		
Caucasian	343	76.2%
Non-Caucasian	53	11.7%
Missing	54	12.0%
<i>First-Generation</i>		
yes	80	17.8%
no	325	80.2%
Missing	45	10.0%
<i>Type of Institution</i>		
public 4-year	221	49.1%
private 4-year	210	46.7%
Missing	19	4.2%

Table 3.1 Cont.

<i>College GPA</i>		
below a 2.0	6	1.3%
2.00-2.99	58	12.9%
3.00-4.00	333	74.0%
Missing	53	11.8%
<i>High School GPA</i>		
below a 2.0	0	0.0%
2.00-2.99	47	10.5%
3.00-4.00	351	88.2%
Missing	52	11.6%
<i>Peer Mentor</i>		
yes	349	77.6%
no	69	15.3%
Missing		
System	32	7.1%
<i>Met with Peer Mentor Outside of class</i>		
yes	239	53.1%
no	111	24.7%
Missing	100	22.2%
<i>Success Course Required</i>		
yes	244	54.2%
no	173	38.4%
missing	33	7.3%
<i>Credit hours</i>		
1-2 credits	258	57.4%
3-4 credits	157	34.9%
missing	35	7.8%

Table 3.1 Continued

<i>Name of Institution</i>	N	%
Western Private University (WPR)	192	42.7%
Midwestern Public University Two (MWPU2)	85	18.9%
Southern Public University Four (SPU4)	49	10.9%
Midwestern Public University One (MWPU1)	47	10.4%
Southern Private University One (SPR1)	16	3.6%
Southwestern Public University One (SWPU1)	14	3.1%
Southern Public University Three (SPU3)	12	2.7%
Northeastern Private University (NEPR)	10	2.2%
Southern Public University Two (SPU2)	10	2.2%
Not Enrolled in any listed institution	9	2.0%

Two hundred and ten participants were from a four-year private institution and two hundred and twenty-one were from a four-year public institution. The majority of participants were female (72.9%), Caucasian (76.2%), and non-first generation students (72.2%). Participants from the online survey were invited to participate in a follow-up interview. Twenty participants agreed to participate in the follow-up phone interview.

Table 3.2 provides information on the sample of interviewees.

Table 3.2 Demographic Data of Interviewees

<i>(N=20)</i>		
<i>Characteristic</i>	N	%
<i>Gender</i>		
Male	6	30%
Female	14	70%
<i>Type of Institution</i>		
public 4-year	14	70%
private 4-year	6	30%

Table 3.2 Continued Demographic
Data of Interviewees

<i>Ethnicity</i>		
Caucasian	16	80%
Non-Caucasian	4	20%
<i>First-Generation</i>		
yes	9	45%
no	11	55%
<i>High School GPA</i>		
below a 2.0	0	0%
2.00-2.99	5	25%
3.00-4.00	15	75%
<i>College GPA</i>		
below a 2.0	3	15%
2.00-2.99	1	5%
3.00-4.00	16	80%
<i>Peer Mentor</i>		
yes	20	100%
no	0	0%
<i>Met with Peer Mentor Outside of class</i>		
yes	7	35%
no	13	65%
<i>Success Required</i>		
yes	12	60%
no	8	40%
<i>Name of Institution</i>		
Western Private University (WPR)	N	%
Midwestern Public University Two (MWPU2)	6	30%
Southern Public University Four (SPU4)	7	35%
Midwestern Public University One (MWPU1)	2	10%
Southern Private University One (SPR1)	4	20%
Soutwestern Public University One (SWPU1)	0	0%
Southern Public University Three (SPU3)	0	0%
Northeastern Private University (NEPR)	1	5%
Southern Public University Two (SPU2)	0	0%

Pilot Study

A pilot study was conducted using an online survey and questions for a follow-up interview. Four students who had participated in a first-year success course with a peer mentor component completed the pilot online survey. The preliminary findings after reviewing the results of the pilot online survey demonstrated that all participants felt that the first-year success course helped them with all the success course outcomes. They either somewhat or strongly agreed with all the outcomes related to the success course. However, for the results regarding the peer mentor there was one participant who indicated that the peer mentor did not help them with items such as meeting other students, learning about internship opportunities, getting involved on campus, and seeking tutoring services. In the pilot study participants were also asked to define peer mentor and to list characteristics of what makes a good peer mentor. The peer mentors in their first-year course matched their definition and characteristics of a peer mentor. From the perspective of the student the peer mentor represented what the student believed to be their appropriate role as a peer mentor. Therefore, the peer mentor was helpful to them in some but not all ways listed in the survey.

After the pilot online survey results, the survey was reorganized moving the demographic information to the end of the survey. Questions about what activities they found were important to their college student success. These questions were added in order to see if there were certain activities that the students believed contributed to their college student success. A question about how they defined college student success by choosing their top 5 from a list of 17 choices was also added to the survey. This question

was added to see if there was a difference in how students conceptualize college student success when compared to the literature. A description of how these 17 items were determined will be explained in the instrumentation section shortly. I interviewed nine students who had taken a first-year success course with a peer mentor during their freshmen year for the qualitative part of the study. In these interviews I asked questions about the student's experiences and thoughts about college before they came to college, their transition into college, their mentor relationship and first-year success course and what type of influence it had on their transition into college and beyond. I interviewed students that were in the program as mentees their freshmen or sophomore years. I also interviewed mentees who eventually became mentors. I used structured interview questions but also created new questions as I interviewed the students and asked follow-up questions during the interview. The following are a few samples of the questions that I asked: "What were your general expectations about college?"; "How did you feel about your transition from high school to college?"; "Describe your relationship with your mentor". The full set of questions used in the pilot study can be found in the appendix. The interviews showed some interesting findings.

I found a few different themes that helped in understanding and make meaning out of the responses provided by the mentees/interviewees. Initially when I began the interviews I found that the mentor relationship helped the mentee learn ways to be involved and gain experience while in college. Using theoretical sampling I added additional questions regarding the mentor relationship itself and the type of influence it had on the mentees involvement and decision making. These first findings came after

two interviews had been conducted. As I continued to interview students I found some additional items to consider in terms of the analysis.

There was another theme that came out of the findings in terms of the mentor's influence on the mentee's college experience; this included the mentee's perception of the mentor/mentee relationship. If the mentor/mentee relationship was strong and open then the mentor had more of an influence on the mentee's experiences or decision making. If the mentor/mentee relationship was not strong or there was no real connection then the mentor didn't have as much of an influence in the mentee's decision making or participation in activities. One other finding that was interesting was from the students that became mentors themselves. Both mentees that had a strong relationship with their mentor and those that didn't have strong relationships with their mentor became mentors themselves. What was interesting was that those that had a strong relationship with their mentor wanted to be a mentor because of the experience they had with their mentor and they wanted be there to support other students as their mentor did when they were a freshmen. Those mentees that didn't have a strong relationship with their mentor had other reasons, they wanted to help freshmen transition but they wanted to try to have more of an impact on their college transition than their mentor had on them.

After the initial findings from these nine pilot interviews, I found that the questions that I asked regarding their expectations of college and how they learned about college were not necessary to include. These questions did not provide any insight into how the peer mentoring and/or first-year success course contributed to their success. I added a few questions into the follow-up interview based on some of the findings from

the pilot study including the following: How do you think your first-year would have been different if you had not been enrolled in the course or had a peer-mentor? Did you become a peer mentor or would you like to become a peer mentor yourself? If so, why did you decide to become a peer mentor.

Some of the questions I asked earlier in the pilot interviews brought out answers that would be addressed in later questions. It seemed like some of the questions were asking about the same items and students were providing the same responses, therefore the order of the questions were changed, in order to attempt to have further and deeper understanding about their experiences. The pilot of the interview questions helped to reconsider the order of the questions and identified questions that asked students to provide examples regarding their experience.

The findings slightly contradicted the responses from the online survey. Some of the students indicated that their peer mentor was not as helpful as they could be because they did not ask them about their experiences, the peer mentor responded to their questions in a way that they didn't like or the peer mentor didn't meet their expectations. Although, these students indicated that the peer mentor was not helpful they were also able to provide examples regarding their peer mentor helping them learn about tutoring services and because the student went to the tutoring center they were able to raise their grade from a C to an A. Another student said that although her peer mentor didn't always respond to her in a way that she would have liked she did still provide her with answers to her questions and helped her with her transition. The pilot study allowed for the

development of the online survey and follow-up interview questions that were used in the actual study described next.

Instrumentation

An online survey was designed based on the literature and pilot study. An online survey was used as the means to distribute the survey because it allowed for the opportunity to survey students from institutions across the United States. It also provided for more accuracy because the information was downloaded from the online survey system directly into a database that was easily converted into SPSS. This allows for less error in the input of data into SPSS and allowed for analyses to be conducted with accurate data from the study. The online survey was broken down into five different sections 1) defining college student success, 2) understanding the influence of a first-year success course, 3) understanding the influence of peer mentoring, 4) identifying activities important for college student success, and 5) demographic data. It was a 114 item survey measuring the students' perceptions regarding their experience.

In order to develop the first section of the survey regarding college student success and creating a list of definitions on college student success from the perspective of the student, 20 students in a pilot study were surveyed and asked to write down all the ways that they would define college student success. Responses from the twenty students and the different ways college student success is defined in the literature were used to create the seventeen items in the survey. This question measured what the top five definitions of college student success were to each student. Using definitions from the literature allowed us to test what the current research describes as contributing to success

and see if the sample in the study agreed. The seventeen definitions of college student success are listed in table 3.3 with information on whether the definition was provided by the literature or the pilot study.

Table 3.3

List of College Student Success Definitions and Literature that identify each of these as a definition of success.	
Definition of College Student Success	Literature Review
Obtaining a fulfilling and satisfying job after college	From pilot study
Knowing how to balance life responsibilities	(Braxton, 2003; Yazedijan, et. al, 2008)
Graduating from college	(Chickering & Gamson, 1987; Pascarella & Terinzini, 2005; Kuh et al., 2006; Padilla, 2009)
Find out who you truly are	(Willingham, 1985; Upcraft, Gardner & Barefoot, 2005)
Becoming well-rounded	(Kuh et al., 2006, pilot study)
Making lifetime friends	From pilot study
Developing skills such as communication skills	(Willingham, 1985; Kuh et al., 2006)
Earning a high GPA	(Willingham, 1985; Kuh et al., 2006)
Being accepted to graduate school	(Willingham, 1985)
Being connected on/off campus	(Anderson, 1985; Astin, 1993, Kuh et al., 2006))
Getting involved in clubs and organizations	(Anderson, 1985; Tinto; 1985Astin, 1993, Kuh et al., 2006; pilot study)
Learning how to be a team player	(Kuh et al., 2006)
Receiving honors and awards	(Willingham, 1985)
Obtaining an internship while in college	(Kuh et al., 2006; Tinto, 1985)
Working with a faculty member in a research lab	(Kuh et al., 2006, Tinto, 1985)
Obtaining a leadership position	(Willingham, 1985; Kuh et al., 2006, pilot study)
Obtaining a high-paying job after college	From pilot study

The first section of the survey focused on defining college student success. Participants were asked to rank their top five definitions that they believe defined college student success out of a list of seventeen possible definitions.

The second section of the survey focused on the first-year success course. Participants were asked to indicate which course they were enrolled in during their fall 2008 semester at their institution. Once they identified the course they were asked whether the course was a required course or not and the amount of credits they earned for the course. Participants were then asked to rate on a scale of one to four whether they disagreed or agreed with twenty one statements regarding their first-year success course and if the course helped them in the different ways described in the twenty one statements. The responses were based on a likert scale where one equals strongly disagree and four equals strongly agree. The responses are outcomes related to the first-year success course and to the 17 definitions of college student success presented earlier. They are specific indicators of success identified in the literature related to student engagement, academic achievement and persistence towards graduation (Tinto, 1983; Chickering & Gamson, 1987; Astin, 1993; Pascarella & Terenzini, 2005; and Kuh et al., 2006).

The theoretical framework used in this study is related to student engagement which leads to academic achievement and graduation. The outcomes of success measured on the survey regarding first-year success courses are related to these three areas because that is what is described in the literature that makes a difference for college student success. This study is attempting to identify the specific outcomes that the first-

year success course is providing for the students who participate in the course. These outcomes can help us to understand if there are specific attributes of a first-year success course that are encouraging student engagement, achievement and/or persistence. In order to measure these outcomes in the survey this section starts with the statement “participating in a first-year success course or first-year seminar” and ends with some of the following options that the students rated on the likert scale described earlier: *Helped Me To Stay At The University*, *Improved My Motivation To Succeed*, *Provided Me Information About My Career Decisions*, and *Helped Me To Get Involved On Campus*. These statements help to understand if the success course is helping students to engage in the campus community, improve their performance and/or prepare them for their future.

The next section of the survey focuses on the peer mentor component of the first-year success course for those who had a peer mentor. Students were asked information regarding their peer mentor including: if they *Met With Their Peer Mentor Outside Of Class*, *How Many Times They Met*, and *How Long They Met*. They were also asked to rank the top three most important characteristics for peer mentors to have in order to be effective out of a list of ten characteristics that were identified from the pilot study and the literature (Terrion, & Leonard, 2007). Then students were asked to indicate whether their peer mentor had any of the ten characteristics. These questions regarding peer mentor characteristics attempted to understand what the participant viewed as the most important characteristics a peer mentor should have and if their peer mentor had any or all of the ten characteristics listed in the survey.

After providing information regarding their peer mentor and their interaction with their peer mentor participants were asked to rate the same statements regarding their peer mentor as they did with their first-year success course and indicate if their peer mentor helped them to achieve certain outcomes. The statement started with “having a peer mentor” and ended with some of the following options that the students rated on the likert scale just as they did for their first-year success course: *Helped Me To Stay At The University, Improved My Motivation To Succeed, Provided Me Information About My Career Decisions, and Helped Me To Get Involved On Campus*. Again, these statements help to understand if the success course is helping students to engage in the campus community, improve their performance and/or prepare them for their future. These areas are of importance because they are listed in the literature as importance in college student success.

Participants were then asked to indicate whether they agreed or disagreed that certain activities are important for their college student success. These included activities such as having access to financial aid, using tutoring resources, getting involved on campus or getting involved in research. Asking this question allowed us to see in the student’s opinion what types of engagement are important for them to be successful.

Students were asked a final question regarding the overall effectiveness of first-year success courses and a separate question regarding peer mentoring.

The last portion of the survey focused on the demographics of the participants including gender, ethnicity, first-generation and parent’s level of education. This section was to provide demographic data regarding the sample.

Participants were asked in the survey if they would be interested in participating in a follow-up phone interview. Two-hundred and thirty one of the participants said they would be willing to participate in a follow-up interview. In order to interview twenty students, thirty students were sent a recruitment email from diverse ethnic backgrounds, different institutions, both genders and first generation and non first generation college students. Eleven out of the original thirty invited arranged a follow-up phone interview. Another fifty students were contacted asking to participate in the interview and nine more agreed and a total of twenty interviews were conducted. The interview questions asked them to think back to their first year experience class and peer mentoring and how and if they influenced their college experiences. The full set of questions is included in the appendix.

Data Collection

The data was collected in two phases: through an online survey to gather quantitative data and through follow-up phone interviews to gather qualitative data.

In order to send the online survey to the participants in the nine different institutions, each institution had to provide a site authorization letter (see appendix) approving the recruitment email that would be sent out. Participating institutions forwarded a recruitment email which (see appendix) included the link to the online survey to all the students who were enrolled in and completed a first-year success course in fall 2008 at their institution. The online survey was sent to approximately three thousand seven hundred fifty students at nine different universities in the United States. Data was collected over a two-month period and a reminder email was sent out to

students in order to increase the number of participants. Four-hundred and fifty students responded to the online survey which is a twelve and a half percent response rate. Table 3.3 through 3.11 provides a breakdown of demographics by institution. The data was collected through an online survey tool and once all of the data was collected it was then downloaded into SPSS to conduct the analysis.

Twenty students participated in the follow-up interview and responded to a series of 19 questions (see appendix) related to their first-year transition into college and their experiences in the first-year success course and peer mentoring. All 20 interviewees had participated in a first-year success course and had a peer mentor. Table 2.2 provides details regarding the demographics of the participants that were interviewed. Although the intent was to get a more diverse group of students to participate in the follow-up interview in order to include students who didn't have a peer mentor in their class and more students from a non-Caucasian background, the interviews consisted of those who responded and arranged an interview meeting.

The follow-up phone interviews were semi-structured interviews so that I could ask follow-up questions and add or change questions as I interviewed participants and identify themes that need to be examined further (Corbin & Strauss, 2008). The phone interviews were recorded and transcribed.

Data Analysis

In the online survey participants were first asked to pick their top five definitions of student success. This analysis included a table of the seventeen definitions and showed which are most commonly listed in the top five chosen by the participants. This

information allowed for a comparison of what these students perceive as college student success and what is described in the literature.

For this section three different analyses were conducted. First, a descriptive analysis was run to determine the mean response for each outcome and then the means were rank ordered from highest to lowest to see which outcomes had the highest mean response for the first-year success course. Second, a factor analysis was run to determine if there were any correlation between the outcomes of the first-year success course. A factor analysis allows for the determination that any variables are potentially measuring the same aspects of an underlying dimension or factor (Field, 2000). It can also provide validity to the measure itself because it identifies latent variables that are present from the way participants are responding to the questions. It also allows to reduce the large number of outcomes to a smaller more management set of outcomes. These factors are used later in the analysis to see if they have any correlation with *Having A Good Peer Mentor* which will be described in the peer mentor analysis section. The third analysis for first-year success courses included a series of cross tabulations were conducted between six of the outcomes from the first-year success course and six related activities that participants were asked to indicate if the activities were important for their college student success. The cross tabulations helped to demonstrate that if a participant identified a certain activity for example, *Tutoring Services Is Important For Their College Student Success*, do they then feel that the first-year success course *Helped To Seek Tutoring Services*.

The next set of questions in the online survey looked at the peer mentor component of the success course. The same type of analysis was run for the questions

regarding the outcomes for peer mentoring for the students. A descriptive analysis was run to determine the mean response for each outcome and then the means were ranked from highest to lowest to see which outcomes had the highest level of agreement regarding peer mentors. In addition, a factor analysis was run to determine if there was any correlation for the success outcomes of the peer mentor component. The outcomes that were used for the peer mentor were the same 21 that were listed for the first-year success course. The factor analysis was conducted to determine if there were any underlying dimensions for these variables related to the peer mentor component that were different than the first-year success course factors. Additional analyses beyond the factor analysis were run for the peer mentor section. First, participants were asked to rank the top three characteristics that they believed to be important for a peer mentor to have in order to be effective. The ranking of their top three choices provided information on what characteristics they believed to be most important for their peer mentor to have. A table representing their top three choices is displayed in the analysis section. Then participants were asked to indicate whether their peer mentor had any of the ten characteristics of a good peer mentor and they are displayed with their average means from highest to lowest.

A factor analysis was run for the peer mentor characteristics to see if there were any underlying dimensions for these ten variables. A factor *Having A Good Peer Mentor* was created. In order to determine if *Having A Good Peer Mentor* had any relationship with the first-year success course outcome factors or peer mentor outcome factors a correlation was run for these outcome factors separately. The correlation was followed

by linear regressions while holding constant 1) ethnicity, 2) gender, 3) first generation college student 4) parent's level of education completed and 5) Cumulative GPA. The regression determined if there is any significant relationship between peer mentoring characteristics and the outcomes in the first-year success course and outcomes for the peer mentor while holding various items constant. This addresses the question whether the peer mentor has any influence on outcomes related to both first-year success course and the peer mentoring relationship. The regression can provide us with information to determine if there is a direct relationship between the two items without other variables confounding the findings. Essentially this helped to determine if having a good peer mentor is a predictor of the outcome factors identified in the study. The final analysis in the peer mentor section was cross tabulations with the outcomes for the peer mentor and the activities that participants found important to their college student success. Again, this helped to determine that if a student believed that a specific activity, such as meeting with your advisor, is an important activity for their college student success then did the peer mentor help them to seek advising services.

The final set analyses was to help answer the research question "How and to what extent do first-year success courses and peer mentoring compare in influencing college student success"? To answer this question two sets of independent t-tests were conducted comparing the participants who had a peer mentor with those who did not to see if there were any differences in their responses.

The first independent t-test looked at the outcomes of the success course to see if there were any significant differences regarding the success course outcomes between the

group of students of had a peer mentor and the group of students who did not have a peer mentor. This independent t-test attempts to identify if there was any difference in success course outcomes if you had a peer mentor or not.

The comparison was related to four specific questions that were analyzed using the independent t-test which included 1) *Peer Mentor Programs Are Effective For College Student Success*, 2) *First-Year Success Courses Are Effective For College Student Success*, 3) *Having A Peer Mentor Is Important For Your College Student Success* and 4) *Participating In A First Year Success Is Important For Your College Student Success*.

An independent t-test allows us to compare students who had a peer mentor with students who did not to see if there is a significant difference in their response to the questions (Field, 2000)

Follow-up interviews were conducted with twenty of the participants who completed the online survey. Open-ended follow-up interview questions allowed for further investigation on how the peer-mentoring relationship and success course influenced the students' success in college. In their responses I looked for the indicators of success that were investigated in this study and coded their responses according to these indicators. Recurring themes were found that have been identified as success indicators.

Unstructured interviews allow the interviewer to understand how the interviewee understands the experience (Maxwell, 2005). In qualitative portion of this research it is important to understand how the mentor/mentee relationship affected the mentee's (interviewees) success in college as well as how they believe the success course contributed to their success in college. Therefore, structured questions that were open

ended regarding the mentee's experience such as; "describe your relationship with your mentor, how did this relationship influence your first-semester/year in college? Please provide examples, how did you feel about having a mentor during your first semester/first year in college?" allowed for understanding more about how the mentees experienced the relationship and if they felt it had any influence on their college success (Seidman, 2006). The advantages of having flexibility in the structure of the interviews is that it can provide the ability to explore other themes that can develop as interviewing continued with participants. It can also help to better understand how the mentor/mentee relationship and success course influenced the participants' college experience and success (Seidman, 2006). It may also be a disadvantage because without realizing and giving much thought to the question ahead of time there is the possibility of asking leading questions so as to get a response that you want to get (Seidman 2006). "A leading question is one that influences the direction the response will take (Sediman, 2006, p. 84). Conducting follow-up interviews helped to learn more about the influence of peer mentoring and the importance of the relationship itself as well as the impact of the success course.

The mixed methods design of this study allowed to have a broader as well as deeper understanding regarding the influence of first-year success courses and peer mentoring on college student success as well as beginning to understand how college students define success (Creswell, 2003). However, there were some limitations to this study that are described after a brief discussion regarding my positionality.

Positionality

It is important in a qualitative study to understand how the researcher's perspective may influence the study. As an administrator in higher education who created a first-year success course with a peer mentor component I have biases in respect to these programs and their effectiveness for college student success. When interviewing students it was important that I did not share my biases regarding these programs or provide any additional input. I also made sure to not interview students who had participated in the success course that I created. I engaged in open ended questions and kept my responses or sharing of personal experiences out of the interview conversation in order to focus on what the interviewee is sharing (Seidman, 2008). I also made sure to probe and ask follow-up questions and not leading questions in order to avoid getting a manufactured response from the student. It helped that the students I interviewed did not participate in the success course that I developed because it would have been more challenging. Because of my awareness of these biases I was able to accept the responses that students shared regarding their experiences in the course and with their peer mentor without personal bias regarding what I believe to be true about first-year success courses and peer mentoring.

Limitations

There are three limitations to this study: reliability of the survey instrument, the sample and the programming structure and objectives of the first-year success courses and peer mentoring component. The online survey was created by the author of this dissertation based off of literature and a pilot study regarding college student success

outcomes, first-year success courses and peer mentoring. Although, the initial version of the online survey was used in a pilot study and revised based on results from the study and feedback from the participants, it is a survey that has not been utilized before therefore, it may not be as reliable because it has not been widely used or tested. However, a factor analysis was conducted in the analysis which can provide some reliability to the specific questions that were used in the factor analysis because it shows that there were underlying dimensions between the variables in how the participants responded to those questions.

The second limitation has to do with the sample and there are several limitations in regards to the sample. First, the students who responded to participate in the online survey may have been the students who had positive experiences and students who didn't have positive experiences may not want to respond or did not respond as much. Also, it is possible that the institutions only emailed the survey to students who are returning for their second year in college and not all students who were enrolled in the program at the time. This then reduces the opportunity to know if the first-year success course or peer mentoring had any influence on students who did not return to the university. Also, the small sample size can be a limitation because there was a larger representation of students who had a peer mentor versus those who did not. There is a limitation therefore for non-response bias and missing data. From some of the institutions there was a very small sample size and each institution had different curriculum and expectations for their peer mentor programs. Finally, another limitation in regards to the sample was the diversity of the sample, the majority of the sample was Caucasian and female, it would be important

to try to have a more diverse sample because students' experiences and challenges vary based on their backgrounds.

The third limitation has to do with the structure of the programming at the different institutions. Not all the first-year courses or peer mentor programs had the same type of structure or objective across institutions. The only similarity across all programs is that they were first-year success courses. As mentioned earlier there were a small number of participants who were in a class that did not have a peer mentor and the remainder of participants did have a peer mentor. In addition, the course material taught in the success courses is not uniform and each course may have different learning outcomes and course objectives. It was not possible to obtain materials from all of the courses taught because at one institution there were over 100 sections, with different course topics and syllabi. The purpose of the peer mentor may have differed as well across institutions. Some institutions had the peer mentor much more present in the classroom as well as meeting with students outside of the classroom.

The three areas described, survey, sample and structure of programming posed limitations to this study and should be taken into consideration for future similar studies. Implications for future research will be discussed further in the Discussion chapter. The next chapter provides the data analysis and findings of this study.

CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

This research study intended to identify the definition of college student success as explained by college students. In addition, the study attempted to explore the influence of first-year success courses and peer mentoring on college student success. The purposes of this study were accomplished by examining what college students identified as their top five definitions of college student success, and what outcomes their success courses and/or peer mentor programs achieved in terms of helping them to be successful while in college. This chapter will start with the results of the quantitative data analysis of the four stated research questions, followed by the qualitative analysis, and the third section will provide an interpretive analysis comparing the qualitative and quantitative results. The chapter will conclude with a summary of the results and lead into the next chapter which will provide the discussion comparing the results with what was discussed in the literature review in regards to college student success, first-year success courses and peer-mentoring.

Research Question One:

Question 1: How do college students define college student success?

Participants were asked to rank their top five definitions for college student success from a list of seventeen definitions of success as determined by the literature and a pilot study. Table 4.1 shows the most common definitions that students listed in their top five which included: 1) *Obtaining A Fulfilling And Satisfying Job After College* (67.1%), 2) *Knowing How To Balance Life Responsibilities* (64%), 3) *Graduating From College* (54.7%), 4) *Finding Out Who You Truly Are* (53.1%) And 5) *Becoming Well-*

Rounded (51.3%). Over fifty percent of the participants listed each of these definitions as among their top five choices. The top two definitions with the highest percentages with 3% points a part from each other were *Obtaining A Fulfilling And Satisfying Job After College* (67.1%) and *Knowing How To Balance Life Responsibilities* (64%) and *Graduating From College* comes in third with at least 10 percentage points less at 54.7%. This finding runs contrary to the literature which most commonly identifies *Having a High GPA* and *Graduating From College* as indicators of college student success (Willingham, 1985; Kuh et. al., 2006; Padilla, 2009). There are two concepts that emerge from the top five definitions, being in a meaningful job and graduating. The second concept has to do with personal development and self-awareness. Based on the responses to this question, from the students' perspective being a "successful student" has to do with developing themselves and knowing who they are and obtaining a job they enjoy once they have completed college.

The definitions that were in the bottom five with the lowest percentages of responses were 1) *Learning How To Be A Team Player* (8.8%), 2) *Receiving Honors And Awards* (7.1%), 3) *Obtaining An Internship While In College* (6.9%), 4) *Working With A Faculty Member In A Research Lab* (6%), and 5) *Obtaining A Leadership Position* (5.6%). These bottom five definitions of success have to do mostly with involvement in extracurricular activities. Therefore, students may not see these particular activities as essential to their student success, when they are forced to make a choice in which ones rank highest in their definition. In addition, although involvement in internships, working with faculty members, and learning how to be a team player are all listed in the

bottom three these three items can contribute to students *Becoming Well-Rounded* which students did list as part of their top five choices. *Becoming Well-Rounded* can include developing the skills to be a good team player or getting involved in internships and research opportunities. Participants may have chosen *Becoming Well Rounded* as part of their top five because it represented more of the choices listed in the seventeen items.

Table 4.1

List Of Definitions Of College Student Success Chosen by Participants' in Their Top Five (listed here from highest to lowest)

College Student Success Definitions (N=450)	N	%
Obtaining a fulfilling and satisfying job after college	302*	67.1%
Knowing how to balance life responsibilities	288*	64.0%
Graduating from college	246*	54.7%
Find out who you truly are	235*	53.1%
Becoming well-rounded	231*	51.3%
Making lifetime friends	184	40.9%
Developing skills such as communication skills	161	35.8%
Earning a high GPA	131	29.1%
Obtaining a high-paying job after college	94	20.8%
Being accepted to graduate school	73	16.2%
Being connected on/off campus	70	15.6%
Getting involved in clubs and organizations	50	11.1%
Learning how to be a team player	40	8.8%
Receiving honors and awards	32	7.1%
Obtaining an internship while in college	31	6.9%
Working with a faculty member in a research lab	27	6.0%
Obtaining a leadership position	25	5.6%

Note: *denotes top five definitions of college student success

Research Question Two:

How and to what extent does participation in a first-year success course influence student success?

Participants were asked to respond to statements regarding outcomes of their first-year success course. Table 4.2 shows the full list of 21 possible outcomes, based on

previous literature as outlined in the methodology section, for students from the success course based on the participants mean responses.

Table 4.2

Responses To Statement: Participating In a First-Year Success Course or First-Year Seminar

Response/Outcome	Mean	Mod e	SD	% who chose “somewhat agree” and “strongly agree”
Helped me to meet other students	3.19	4	0.88	83.5%
Helped me to learn about campus resources	3.06	3	0.87	81.8%
Helped me to adjust to the university	2.85	3	0.99	70.3%
Allowed me to talk to someone about academic life	2.73	3	0.98	65.5%
Improved my GPA	2.71	3	1.01	65.2%
Helped me set future goals	2.70	3	0.92	65.4%
Helped me learn about academic dates and deadlines	2.65	3	0.95	60.9%
Improved my motivation to succeed	2.57	3	0.94	60.1%
Helped me to seek advising services	2.56	3	1.02	55.1%
Helped me to meet with my faculty members	2.56	3	0.97	54.2%
Helped me develop academic skills	2.56	3	0.97	59.0%
Contributed to my success as a college student	2.56	3	0.96	56.8%
Helped me to get involved on campus	2.46	3	0.95	51.2%
Improved my self-confidence	2.42	3	0.90	52.9%
Allowed me to talk to someone about social life	2.42	3	1.00	48.7%
Provided me info about my career choices	2.31	3	1.04	43.6%
Helped me to seek tutoring services	2.29	3	0.98	43.6%
Helped me to stay at the university/college	2.18	3	0.94	41.0%
Helped me with my major choices	2.09	1	1.01	33.7%
Helped me learn about research and internship opportunities	2.02	2	0.90	28.3%
Helped with financial issues	1.81	1	0.85	19.5%

Note: Scale 1 = strongly disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = strongly agree

This question was asked to determine if the course helped them achieve certain outcomes such as: *Helped Me To Adjust To The University, Improved My Gpa*, etc. The outcomes in the top five with the highest means were 1) *Helped Me To Meet Other Students* (M = 3.19, SD = .88), 2) *Helped Me To Learn About Campus Resources* (M=3.06, SD=.87), 3) *Helped Me To Adjust To The University* (M=2.85, SD=.99), 4) *Allowed Me To Talk To Someone About Academic Life* (M=2.73, SD=.98), and 5) *Improved My GPA* (M=2.71, SD=1.01). The outcomes in the bottom five with the lowest means were 1) *Helped Me To Seek Tutoring Services* (M=2.29, SD=.98), 2) *Helped Me To Stay At The University/College* (M=2.18, SD=.94), 3) *Helped Me With My Major Choices* (M=2.09, SD = .90), 4) *Helped Me Learn About Research And Internship Opportunities*(M=2.02, SD=.85) and 5) *Helped Me With Financial Issues* (M=1.81, SD=.85).

The concepts that arose out of the top five outcomes for the success course were connection with resources and other students, adjusting to college life and improving academics. These concepts are all related to what helps with a positive transition from high school to college. The success course outcome, contributed to my college student success (M = 2.56, SD .96), was listed as the 12th highest mean out of the 21 outcomes however, the percentage of students who somewhat or strongly agreed with this outcome was 56.8%. Therefore, more than half of the students also felt that the success course contributed to their college student success.

A factor analysis was conducted to determine if there was any correlation or relationships between each of the success outcomes from the first-year success course

identified by the participants. The factor analysis was run with the option of showing only those items that had a factor loading of a .40 or higher. Three components with eigenvalues of 1 or greater were extracted and rotated. These three factors accounted for 64% of the total variance. This analysis showed overlap between the variables.

Therefore, factors were created for items that had the highest factor loadings, if they had two loadings for one factor. Table in the appendix shows the loadings from the factor analysis; those items that belong under that factor are in bold face.

Factor 1: *Academic And Personal Development* (eigenvalue = 9.739) accounted for 51% of the variance and had ten items which included *Helped Me Develop Academic Skills, Improved My GPA* and *Helped Me Adjust To The University*; Factor 2: *Social And Academic Integration* (eigenvalue = 1.336) accounted for 7% of the variance and had seven items which included, *Helped Me To Meet With My Faculty Members* and *Helped Me To Learn About Campus Resources*; and Factor 3: *Major And Career Support* (eigenvalue = 1.102) accounted for 5.7% of the variance and had three items which included *Helped Me Learn About Internship And Research Opportunities* and *Helped With My Major*. A reliability test was conducted on all three factors. As shown in table 4.3 all three factors had a Cronbach's Alpha of .82 or higher which demonstrates a high reliability of the factor.

The rationale used in naming these three factors was based on the items under each factor and partially determined by the literature regarding student success outcomes (Kuh et. al., 2006; Astin, 1993; Tinto, 1987). The *Academic and Personal Development* factor included items listed in the literature that help students develop both personally

and academically such as improved self-confidence and improved academic GPA. For the *Social and Academic Integration factor* the times included in this factor had to do with students seeking services on campus through advising, tutoring, meeting with faculty. Tinto describes these items as both social and academic integration and this is why these items were kept under the factor and named as such.

Table 4.3 Reliability for Factor Analysis for First Year Success Courses

Name of Factor	Range	Cronbach's Alpha	Mean	Interpretation
Academic and Personal Development	1 to 4	0.935	2.561	The higher the number the more a student feels that the success course has helped them develop academically and personally including increase in self-confidence and academic GPA
Social Academic Integration	1 to 4	0.871	2.69	The higher the number the more a student feels that the success course helped them to connect with academic and social resources such as faculty members, tutoring, advising and other students.
Major and Career Support	1 to 4	0.826	2.146	The higher the number the more a student feels that the success course helped them to make career and major choices and become involved in opportunities to help them develop for their future career.

Participants were asked to respond to a series of statements regarding activities in college and whether they are important for their college student success. Table 4.4 shows their mean responses from highest to lowest.

Table 4.4

Responses To Question: How Important Are Each Of These Activities To Your College Student Success?

Response/Outcome	Mean	Mode	SD	% who chose “somewhat agree” and “strongly agree”
Having access to financial aid	3.54	4	0.714	91.9%
Meeting with your academic advisor	3.39	4	0.754	88.3%
Using tutoring resources	3.04	3	0.788	79.6%
Getting involved in a club or organization	2.98	3	0.837	74.9%
Getting involved in research	2.81	3	0.857	66.1%
Being involved in a club	2.79	3	0.867	65.0%
Having a job on campus	2.72	3	0.849	63.8%
Having a good peer mentor	2.69	3	0.877	61.6%
Participating in a success course	2.43	3	0.968	49.1%
Having a job off campus	2.30	2	0.845	36.9%

Note: Scale 1 = strongly disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = strongly agree

The top three activities that students chose as being important to their college student success were 1) *Having Access To Financial Aid* (M=3.54, SD=.72), 2) *Meeting With Your Academic Advisor* (M=3.39, SD=.75) and 3) *Using Tutoring Resources* (M=3.04, SD=.79). *Having A Good Peer Mentor* (M=2.69, SD=.88) was in eighth place with 62% who said that it is an important activity for college student success, followed by *Participating In A Success Course* (M=2.43, SD=.97) in ninth place with 49% who said that it is important for their college student success. These students believed that the most important activity that contributed to their college student success was *Having Access To Financial Aid*.

A cross tabulation was conducted between six of the activities in table 4.4 and six of the success course outcomes listed in table 4.2. Table 4.5 shows the six activities and

six outcomes that were used in the cross tabulation. These cross tabulations show us if the activity is important to the student for their college student success and whether they feel the course helped them to engage in that specific activity.

Table 4.5

Items Used For Cross Tabulation Success Course Outcomes	
University Activities That contributes to College Student Success	Success Course Outcomes
Having access to financial aid	Helped me with financial issues
Participating in a first-year success course	Contributed to my success as a college student
Meeting with an academic advisor	Helped me to seek advising services
Getting involved in research	Helped me learn about internship and research opportunities
Using tutoring services	Helped me to seek tutoring services
Getting involved in a club or organization	Helped me to get involved on campus

The first cross tabulation which is presented in table 4.6 shows the cross tabulation between *Having Access To Financial Aid* and *The Success Course Helped Me With Financial Issues*. This table indicates that the majority of students (92%) agree that *Having Access To Financial Aid* is important for their college student success but disagree (74%) that the *Course Helped Them With Financial Issues*. The results reveal that success courses are not perceived to assist with financial aid issues, which participants believe is an important activity for their college student success. This can mean that in most of the success courses the students didn't learn about information related to financial issues such as access to financial aid, on-campus or off-campus jobs or how to manage their money. Also, the primary focus of a first-year success course, by

definition, is supporting students in their transition from high school to college which should include an understanding of how to manage money and apply for financial aid. Therefore, it appears that financial aid issues are overlooked in student success courses.

Table 4.6

Having Access To Financial Aid Contributes To College Student Success * Success Course Helped With Financial Aid Issues Cross Tabulation					
Success Course Helped With Financial Issues					
			Disagree	Agree	Count
Having Access To Financial Aid Is Important For My College Student Success	Disagree	Count	29	3	32
		% of Total	7%	1%	8%
	Agree	Count	295	73	368
		% of Total	74%	18%	92%
Total	Count	324	76	400	

Table 4.7 shows the cross tabulation for student responses to the question if their participation in a success course contributed to their college student success compared to the more general question, do they think participating in a success course is an important activity for their college success. Forty-nine percent of the participants believed that participating in a success course was an important activity for their college student success. Forty-one percent of the forty-nine percent indicated that the success course they participated in contributed to their success. Conversely, 51% of the participants believed that participating in a success course is not an important activity for their college

student success, however, only 35% of the 51% who believed that it not an important activity disagreed that participating in a success course contributed to their success. This finding shows that students' are divided about how they feel about their success course and if the course contributed to their success. This can be dependent upon many things such as the topic of the course, the structure of the course, the relevancy of the assignments and the amount of the assignments. As we will see later in the qualitative section some students felt the course was very helpful and others felt that it was not a good use of their time and that it did not help them in their college student success. The results here also seem to support that students are split about the helpfulness of participating in a success course and how important a success course is to their college student success.

Table 4.7

Participating in a Success Course is Important for my College Student Success * Participating in a Success Course Contributed to My Success as a College Student Cross tabulation					
Participating in a Success Course Contributed to My Success as a College Student					
			Disagree	Agree	Total
Participating in a success course is important for my college student success	Disagree	Count	139	65	204
		% of Total	35%	16%	51%
	Agree	Count	33	162	195
		% of Total	8%	41%	49%
Total	Count	172	227	399	

The next table, 4.8, looks at academic advising and if the participants indicated whether academic advising is important for their college student success and if the

success course helped them to seek academic advising services. The table shows that 89% believe that *Meeting With An Academic Advisor* was important for their college student success. Fifty-one percent of the eighty-nine percent believed that the success course *Helped Them To Seek Advising Services* while 38 % percent believe that the success course did not help them to seek advising services. This was the second highest activity that students listed as being important for their college student success.

Table 4.8

Meeting with an Academic Advisor is Important for My College Student Success* Participating in a Success Course Helped me to Seek Advising Services Cross Tabulation					
			participating in a success course helped me to seek advising services		
			Disagree	Agree	Total
meeting with an academic advisor is important for my college student success	Disagree	Count	27	17	44
		% of Total	7%	4%	11%
	Agree	Count	152	204	356
		% of Total	38%	51%	89%
Total	Count	179	221	400	

A little more than half of the students indicated that the success course helped them to seek advising services. Participants may have learned about the importance of advising during the class and been provided information regarding how to meet with their advisor. This finding demonstrates that in some first-year success classes, students are not being provided with information on who their advisor is or how to arrange a meeting with their advisor even though the student believed that it was important for their college student success. Table 4.9 shows students' engagement in research opportunities. The

table shows that 45% believe that getting involved in research is important for their college student success but that the success course did not help them learn about research or internship opportunities while twenty percent said that it did. Therefore, this finding may be indicative of the fact that in the transition course they are not focusing on future important opportunities to get involved but rather on the current transition and what is important for their first year. An important note to make regarding the 65% of the participants who agreed that getting involved in research is important for college student success, when they responded to the online survey they were in their second year of college and may have realized then that getting involved in research is important

Table 4.9

Getting Involved in Research is Important for My College Student Success* Participating in a Success Course Helped me Learn About Research and Internship Opportunities Cross tabulation					
participating in a success course helped me learn about internship and research opportunities					
			Disagree	Agree	Total
getting involved in research is important for my college student success	Disagree	Count	105	32	137
		% of Total	26%	8%	34%
	Agree	Count	183	80	263
		% of Total	45%	20%	65%
Total	Count	288	112	400	

Table 4.10 shows participants' responses regarding tutoring services and their success course. Eighty percent indicated that tutoring services are important for their college student success. Out of the 80% of students who indicated tutoring services are important for their college student success, 42% indicated that the course did not help

them to seek tutoring services while 37% said that it did. Although 80% of these students feel that tutoring is important for their success, the course didn't help all of them to seek tutoring service. Fifty-seven percent of the participants indicated that the success course did not help them to seek tutoring services. Therefore, this is another area of support services that the courses do not address despite students indicating that it is an important part of their college student success.

Table 4.10

Using Tutoring Services is Important for My College Student Success*Participating in a Success Course Helped me to Seek Tutoring Services Cross Tabulation					
			participating in a success course helped me to seek tutoring services		
			Disagree	Agree	Total
using tutoring services is important for my college student success	Disagree	Count	60	20	80
		% of Total	15%	5%	20%
	Agree	Count	168	151	319
		% of Total	42%	37%	80%
Total	Count	228	171	399	

The final cross tabulation examined getting involved in a club or organization. Table 4.11 shows that 75% percent of the participants felt that getting involved in a club or organization is important for their college student success. Forty-three percent of those that indicated that it is important to their college student success also said that the course helped them to get involved on campus; thirty-two percent said that it did not help them to get involved on campus.

Table 4.11

Getting Involved in a Club or Organization is Important for My College Student Success* Participating in a Success Course Helped me to Get Involved on Campus					
participating in a success course helped me to get involved on campus					
			Disagree	Agree	Total
getting involved in a club or organization is important for my college student success	Disagree	Count	65	35	100
		% of Total	16%	9%	25%
	Agree	Count	129	171	300
		% of Total	32%	43%	75%
Total	Count	194	206	400	

A portion of the students, enrolled in a success course, were able to learn about how to get involved on campus. Again, the results show a bit of a divide between students on the outcome of getting involved in a club or organization. Students believe it is important to their college student success and the course is not providing this information to student as it needs to. The success course should be supporting what the students feel will help them to be a successful college student.

These six cross tabulations provide us with information regarding what types of activities participants indicated that are important for their college student success and if the success course is helping them to learn about and engage in these activities. The cross tabulations demonstrate that the success course did not help students with financial issues while *Having Access To Financial* was rated as the most important activity for success by the students in this study. The second highest important activity for students was *Meeting With An Academic Advisor*, students were split on whether the course

helped them to meet with their academic advisor. The same was true for *Helped Me To Use Tutoring Services* or *Helped Me To Get Involved In Clubs Or Organizations*. These findings suggest that success courses are not producing the student outcomes that the students themselves find to be important for their own success. Some of these outcomes are lacking in the curriculum for the course. Students' needs are not necessarily being addressed in the structure of these courses based on what they believe to be important for their success in college.

Research Question Three:

How and to what extent does peer-mentoring influence college student success?

The next set of findings is related to the peer mentor component of the success course and the peer mentoring relationship. Sixty-nine (15%) of the four-hundred fifty participants did not have a peer mentor in their first-year success course and three hundred and forty-nine of the participants did have a peer mentor. Two hundred and thirty-nine (68%) participants met with their peer mentor outside of class and the remainder only interacted with the peer mentor during class. Forty-eight percent of the students who had a peer mentor met with their peer mentor at least two times and 24% met three times outside of class during the semester and the remaining percent met four or more times. Eighty percent of those who met with their peer mentor outside of class met between one to thirty minutes each time. The remaining 20% met 31minutes or more outside of class.

Participants with a peer mentor were asked to respond to the same statements regarding their peer mentors as they did for the success course to determine if the peer

mentor helped them achieve similar outcomes. The outcomes in the top five were 1) *Helped Me To Learn About Campus Resources* (M = 2.85, SD 1.01), 2) *Allowed Me To Talk To Someone About Academic Life* (M = 2.85, SD 1.01), 3) *Helped Me To Adjust To The University* (M=2.81, SD = 1.01), 4) *Helped Me Set Future Goals* (M=2.65, SD = 1.03), and 5) *Allowed Me To Talk To Someone About Social Life* (M=2.60, SD = 1.03). These top five outcomes were slightly similar to the top 5 outcomes for the success course. There are three out of the top five that they had in common, the first year success course outcomes in common included *Helped Me To Learn About Campus Resources* which was as number 2 in the top 5, *Helped Me To Adjust To The University* which was at number 3 in the top 5 and *Allowed me to Talk to Someone About Academic Life* which was at number 4 out of the top 5. Table 4.12 shows the full list of twenty-one outcomes ranked from highest to lowest mean.

The themes of the top five are related to connecting with another student and campus resources, adjusting to the university and setting goals for the future. The peer mentor outcome, *Contributed To My Success As A College Student* (M=2.56, SD=.98), was seventh out of the 21 outcomes and 59.4% of the participants either somewhat or strongly agreed with this statement. Therefore, close to 60% of the students felt that having a peer mentor contributed to their success as a college student. From the top five outcomes it seems that peer mentors provided students with someone they could talk to about their social and academic life and help them set goals for their future. Therefore, the peer mentor shared their own experiences with the mentee which helped the mentee adjust to the university life.

The outcome with the lowest five means included 1) *Helped Me To Stay At The University/College* (M=2.12, SD=.96) 2) *Improved My Gpa* (M=2.10, SD=.9) 3) *Helped Me With My Major Choices* (M=2.08, SD=.96), 4) *Helped Me Learn About Research And Internship Opportunities* (M=2.0, SD=.87) and 5) *Helped Me With Financial Issues* (M=1.77, SD=.82). The outcomes with the bottom three means were the same bottom three for the success course. The bottom five were related to selection of major and getting involved in internships as well as improving their GPA.

These results demonstrate that a peer mentor seems to provide the opportunity for a mentee to talk about their social and academic life and what goals they have for the future. This peer relationship allows the mentee to have the opportunity for someone to share their experiences with them and provide an avenue for discussion related to the first-year transition. The peer mentor helps the mentee to learn about campus resources and how to navigate the university. The results show that the peer mentor helps students to adjust to the new environment rather than tutoring students in specific subjects or helping them academically to improve their GPA. They help the student by sharing their experiences and relating to them.

Table 4.12
Responses to statement: Having a Peer Mentor

Response/Outcome	Mean	Mode	SD	% who chose “somewhat agree” and “strongly agree”
Helped me to learn about campus resources	2.85	3	1.00	72.0%
Allowed me to talk to someone about academic life	2.85	3	1.01	70.2%
Helped me to adjust to the university	2.81	3	1.02	69.6%
Helped me set future goals	2.65	3	1.03	61.0%
Allowed me to talk to someone about social life	2.60	3	1.03	58.1%
Helped me to meet other students	2.59	3	1.02	58.2%
Contributed to my success as a college student	2.56	3	0.98	59.4%
Improved my motivation to succeed	2.50	3	1.02	57.1%
Helped me learn about academic dates and deadlines	2.50	3	0.97	55.0%
Helped me to meet with my faculty members	2.48	3	1.02	51.6%
Helped me develop academic skills	2.44	3	0.96	53.3%
Helped me to seek advising services	2.39	3	0.96	51.0%
Helped me to get involved on campus	2.39	3	0.97	48.1%
Improved my self-confidence	2.34	3	0.99	47.1%
Helped me to seek tutoring services	2.28	3	0.94	44.5%
Provided me info about my career choices	2.25	2	1.00	40.1%
Helped me to stay at the university/college	2.12	1	0.96	37.5%
Improved my GPA	2.10	2	0.90	33.0%
Helped me with my major choices	2.08	2	0.96	30.7%
Helped me learn about research and internship opportunities	2.00	2	0.87	30.1%
Helped with financial issues	1.77	1	0.82	17.8%

Note: Scale 1 = strongly disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = strongly agree

A factor analysis was conducted to determine if there were any relationships between the participants responses regarding outcomes related to their peer-mentor. The factor analysis was run with the option of showing only those items that had a factor loading of .40 or higher. This analysis provided different factors than what had emerged for the success course outcomes.

Two components with eigenvalues of 1 or greater were extracted and rotated. These 2 factors accounted for 70% percent of the total variance. This analysis showed overlap between the variables and made it challenging to identify underlying factors. Therefore, factors were created for items that showed an absolute value of .50 or higher. Table X in the appendix shows the loadings from the factor analysis. Table 4.13 shows the reliability test that was conducted on the two factors related to the peer mentor outcomes. The Cronbach's Alpha was .928 and above therefore the reliability of these factors are very high.

Factor 1: *Psychosocial Support* (eigenvalue = 12.953) accounted for 64% of the variance and had 14 items which included *Improved My Self-Confidence, Improved My Motivation To Succeed* and *Helped Me Adjust To The University*; Factor 2: *Academic And Career Support* (eigenvalue = 1.102) accounted for 6% of the variance and had 7 items which included, *Helped Me To Meet Other Students, Helped Me To Seek Tutoring Services, Helped Me Learn About Internship And Research Opportunities* and *Helped With My Major*.

Table 4.13 Reliability for Factor Analysis for Peer Mentor

Name of Factor	Range	Cronbach's		Interpretation
		Alpha	Mean	
Psychosocial Support	1 to 4	0.964	2.54	The higher the number the more a student feels that the peer mentor helps them to develop both social and academically by helping them seek support through tutoring, advising, meeting with faculty and connecting to students in different ways.
Academic-Career Support	1 to 4	0.928	2.122	The higher the number the more a student feels that the peer mentor helps them learn about the options for a major or future career and to connect with resources that support their academic development.

The rationale used in naming these 2 factors was based on the items under each factor and partially determined by the literature regarding mentoring outcomes (Kram, 1985; Higgins & Kram, 2001; Ortiz, Walters, & Gilson, 2005).

Participants who had a peer mentor were asked to rank the top three out of ten peer mentor characteristics they believe peer mentors should have in order to be effective. The top three characteristics chosen most often by the participants were 1) *Knowledgeable* (43.3%), 2) *Friendly* (43.3%) and 3) *Good Listener* (37.5%). The characteristic given the lowest ranking was *Open-Minded* (13.8%). Table 4.14 shows the rankings of all ten characteristics.

Table 4.14
Peer Mentor Characteristics in Order to be Effective, Rated in
Top Three, Shown Here Ranked from Highest to Lowest in top
three

Peer Mentor Characteristics (N = 349)	No.	%
Knowledgeable	151*	43.3%
Friendly	151*	43.3%
Good Listener	131*	37.5%
Help with your academic and personal life	128	36.7%
Resourceful	101	28.9%
Reliable	95	27.2%
Genuine	84	24.1%
Available	73	20.9%
Honest	69	19.8%
Open Minded	48	13.8%

Note: *denotes top three characteristics of peer mentors

Participants were also asked to respond to the question to what extent they agreed that their peer mentor had each of the ten characteristics listed in table 4.15. The characteristics with the top three highest means were 1) *Friendly* (M=3.63, SD=.67), 2) *Honest* (M=3.6, SD=.60), and 3) *Good Listener* (M=3.52, SD=.70). The characteristics that were in the bottom three with the lowest means were 1) *Resourceful* (M=3.37, SD=.77), 2) *Available* (M=3.22, SD=.86) and 3) *Help With Personal And Academic Life* (M=2.96, SD=.92). These findings suggest that student are more interested in their mentees interpersonal skills rather than their knowledge base as being most important to be an effective mentor. However, all means with the exception of *Help With Your Academic And Personal Life* were above 3 which indicates that participants mostly agreed that their peer mentor had all of these characteristics. The results for all 10 characteristics are in table 4.15. These results indicate that the majority of the

participants' peer mentors did possess these ten characteristics. Also, their peer mentor characteristics had two out of the three characteristics that they ranked in the top three which was *Friendly* and *Good Listener*. These findings demonstrate that the majority of the participants felt that their peer mentor had these characteristics as a peer mentor.

What is interesting is that *Help With Personal And Academic Life* had the lowest mean.

Peer mentors are supposed to help mentees with personal and academic life (Kram, 1985; Higgins & Kram, 2001) and almost 30% of the participant indicated that their peer mentor did not have this characteristic.

Table 4.15 Peer Mentor Characteristics of Students
Peer Mentors

Response/Outcome	Mean	Mode	SD	% who chose 3 and 4
Friendly	3.63	4	0.669	90.5%
Honest	3.60	4	0.604	94.0%
Good listener	3.52	4	0.702	89.4%
Genuine	3.49	4	0.707	90.5%
Reliable	3.45	4	0.775	86.6%
Open-minded	3.39	4	0.716	87.1%
Knowledgeable	3.37	4	0.721	87.7%
Resourceful	3.37	4	0.777	84.2%
Available	3.22	4	0.862	79.6%
Help with your academic and personal life	2.96	3	0.912	71.9%

Note: Scale 1 = strongly disagree, 2 = somewhat disagree, 3 = somewhat agree, 4 = strongly agree

To determine if the peer mentor characteristics had any influence on the outcomes of the course or peer mentoring a correlation analysis was conducted. A factor analysis of the ten peer mentor characteristics was conducted first to see if there were any underlying dimensions between the characteristics, only one component with an

eigenvalue of 1.0 or greater was created. Therefore, *Having A Good Peer Mentor* (eigenvalue of 3.502) was created by combining all the peer mentor characteristics into one factor. Five correlations were conducted with the three outcome factors for the success course 1) *Academic And Personal Development*, 2) *Academic And Social Integration* and 3) *Major And Career Support*; and the two outcome factors for peer mentor 1) *Psychosocial Support* and 2) *Academic – Career Support*. The correlations in tables 4.16 and 4.17 show that there is a positive correlation between having a good peer mentor and the outcome factors for the success course and the peer mentor with a p-value of $< .01$.

Table 4.16 Correlations Between Having a Good Mentor Factor and three Success Course Factors

Success Course Outcome Factors		Having a good mentor factor
Academic and Personal Development	Pearson Correlation	0.300**
	Sig. (2-tailed)	0.000
	N	326
Social and Academic Integration	Pearson Correlation	0.338**
	Sig. (2-tailed)	0.000
	N	332
Major and Career Support	Pearson Correlation	0.153**
	Sig. (2-tailed)	0.005
	N	330

** . Correlation is significant at the 0.01 level (2-tailed).

Table 4.17
Correlations, Peer Mentor Outcome
Factors and Having a Good Mentor

Peer Mentor Outcome Factors		Having a good mentor factor
Psychosocial Support	Pearson Correlation	0.679**
	Sig. (2-tailed)	0.000
	N	323
Academic and Career Support	Pearson Correlation	0.481**
	Sig. (2-tailed)	0.000
	N	333

** . Correlation is significant at the 0.01 level (2-tailed).

The strongest correlations are between *Having A Good Peer Mentor* and the *Psychosocial Support* ($r=.681$) and *Academic-Career Support* ($r=.481$) which were the two outcome factors for the peer mentor. If students indicate that they *Have A Good Peer Mentor* then their peer mentor is more likely to help them with *Psychosocial Support* which includes *Helping Them Adjust To The University, Develop Self-Confidence, and Having Someone To Talk To About Both Their Social And Academic Life*. In addition, *Having A Good Peer Mentor* makes it more likely that their peer mentor will provide them with *Academic-Career Support* which included providing them with information on career decisions, help with major selection and seeking tutoring services.

There were also positive correlations with *Having A Good Peer Mentor* and the three outcome factors for the success course; 1) *Academic And Personal Development* ($r=.300$), 2) *Social And Academic Integration* ($r=.338$), and 3) *Major And Career Support* ($r=.153$). These correlations show a positive relationship, although somewhat weak, with

Having A Good Peer Mentor in a success course with the outcome factors for the success course. Therefore, it is important that the peer mentor has the aforementioned ten characteristics. The characteristics of the peer mentor seem to make a difference in both the success course outcomes and the peer mentor outcomes. Students are more likely to be successful and engage in activities in college that will make them successful if they have a peer mentor who has these ten characteristics.

To see if the correlation is still significant, five linear regressions were run for the five outcome factors while holding constant the following background variables:

1)*Ethnicity*, 2)*Gender*, 3)*First-Generation College Student*, 4)*Father's Highest Level Of Education Completed*, 5)*Mother's Highest Level Of Education Completed*, and 6)*Cumulative College GPA*.

Table 4.18 shows the regression analysis for *Having A Good Peer Mentor* and the outcome factor, *Academic And Personal Development* (success course factor). *Having A Good Peer Mentor* is a significant predictor of the *Academic And Personal Development success course factor*. The *Academic And Personal Development* factor included variables such as *Helped Me Develop Academic Skills*, *Improved My GPA*, *Improved My Motivation To Succeed*, *Helped Me Set Future Goals*, and *Improved My Self-Confidence*. Therefore, it seems from these results that peer mentors have an impact on students' development both personally and academically as part of the success course. This regression analysis also shows that there is a significant positive correlation between *Cumulative GPA* and *Academic and Personal Development* (success course factor). One possible interpretation is that students who have a higher GPA are more committed to the

class and therefore benefit from the class more than students with a lower GPA. In addition, there was a negative correlation between Father's Level of Education and *Academic And Personal Development* (success course factor). First generation college students might benefit more than non-first generation college students from the class and have more academic improvement. The negative correlation indicates that the lower the level of their Father's education the more their *Academic And Personal Development increases*. This may be due to the limited college knowledge that students have coming in to the university if they don't have a father who attended college. Therefore, having the peer mentor and someone to help them improve academically and personally makes a difference. There is also a positive correlation between having a *Academic and Personal Development* and type of institution. A student from a public institution is more likely to develop academically and personally by having a good peer mentor.

The adjusted r square for the *Academic Personal Development* factor was .193 which suggests that 19% of the variability of the *Academic Personal Development Factor*. Although not large in the absolute sense, it does indicate a relationship between the Academic Personal Development factor and having a good mentor.

Table 4.18 Regression; Academic and Personal Development Factor Regressing on Having Good Peer Mentor

	Unstandardized Coefficients	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	-0.05	0.40		-0.13	0.90
A Good Peer Mentor**	0.51	0.07	0.40	7.17	0.00
Ethnicity	0.17	0.13	0.07	1.25	0.21
Gender	0.14	0.11	0.07	1.27	0.20
Are you a first generation college student	-0.10	0.14	-0.05	-0.69	0.49
Fathers Highest Level of Education**	-0.06	0.02	-0.16	-2.25	0.02
Mothers Highest Level of Education**	0.02	0.03	0.04	0.68	0.50
What is your cumulative GPA in college	0.13	0.05	0.15	2.72	0.01
Type of Institution	0.43	0.10	0.28	4.45	0.00

a. Dependent Variable: Academic_Personal_Development, **p<.01

Table 4.19 shows the regression analysis for *Having A Good Mentor* and *Social And Academic Integration* (success course factor). *Having A Good Mentor* is a significant predictor of student's *Social And Academic Integration*. The *Social And Academic Integration* factor included variables such as *Helped Me To Seek Advising Services, Allowed Me To Have Someone To Talk To About Academic Life, Helped Me To Meet Other Students, Helped Me To Seek Tutoring Services, and Helped Me To Meet With My Faculty Members*. Therefore, it seems from this result that a peer mentor encourages student engagement in meaningful education activities such as tutoring or

meeting with their professor. This regression also shows a negative correlation between Father's level of education and *Social And Academic Integration* (success course factor). As suggested earlier this could mean that first generation college students benefit more from the class and the class helps them to become more socially and academically integrated into the university. There is also a positive correlation between *Social and Academic Integration and Type of Institution* Therefore, *the Social and Academic Integration is related to the type of institution that the student attends. Students who are from a public universities are more likely socially and academically integrate in relationship to the course.*

Table 4.19 Regression; Social and Academic Integration Factor Regressing on Having a Good Peer Mentor

	Unstandardized Coefficients	Std. Error	Standardized Beta	t	Sig.
(Constant)	0.46	0.39		1.17	0.24
A Good Peer Mentor**	0.52	0.07	0.42	7.39	0.00
Ethnicity1	0.01	0.13	0.00	0.05	0.96
Gender	0.13	0.11	0.07	1.20	0.23
Are you a first generation college student	0.12	0.13	0.06	0.91	0.37
Fathers Highest Level of Education Completed	-0.04	0.02	-0.12	-1.72	0.09
Mothers Highest Level of Education Completed	0.02	0.03	0.04	0.65	0.52
What is your cumulative GPA in college	0.08	0.05	0.10	1.80	0.07
Type of Institution**	0.28	0.09	0.19	3.00	0.00

a: Dependent Variable Social and Academic Integration Factor relationship with Having a Good Peer Mentor, $p < .01$

The adjusted r -square for the Social and Academic Integration Factor was .173 which suggests that 17% of the variability of the *Social and Academic Integration factor*. Although not large in the absolute sense, it does indicate a relationship between the Academic Personal Development factor and having a good mentor.

The final regression (table 4.20) for the third success course factor, *Major And Career Support* was also statistically significant with a p -value less than .01. Therefore, *Having A Good Peer Mentor* is a significant predictor of helping with *Major And Career Support* (peer mentor outcome). *The Major And Career Support* factor included variables such as *Helped Me With My Major Choice And Helped Me Learn About Internship And Research Opportunities*. Therefore, *Having A Good Peer Mentor* also helped students to learn more about their major and opportunities that would help them enhance their skills for their future career. Again, with the *Major And Career Support* factor there is also a negative correlation with *Fathers Highest Level Of Education Completed*. This result demonstrates that those participants whose father has completed a lower level of education have a higher level of *Major And Career Support*. Again, this could mean that first generation college students benefit more from the class because they have less college knowledge and their parents are not able help them with major or career exploration and options. In addition, there is once again a positive relationship between major and career support and the type of institution. Those from public institutions are more likely to feel that their peer mentor provides more support for their major and career

choices. These courses seem to be more successful for students who are from a large public university.

Table 4.20: Regression; Major and Career Factor Regressing on having a Good Peer Mentor

	Coefficients ^a			t	Sig.
	Unstandardized Coefficients	Std. Error	Standardized Coefficients		
(Constant)	0.23	0.46		0.49	0.62
A Good Peer Mentor**	0.38	0.08	0.27	4.59	0.00
Ethnicity1	0.14	0.15	0.05	0.91	0.36
Gender	-0.01	0.13	-0.01	0.10	0.92
Are you a first generation college student	0.13	0.16	0.06	0.84	0.40
Fathers Highest Level of Education Completed	-0.02	0.03	-0.06	0.80	0.42
Mothers Highest Level of Education Completed	0.04	0.03	0.09	1.31	0.19
What is your cumulative GPA	0.02	0.05	0.03	0.46	0.65
Type of Institution**	0.55	0.11	0.33	4.97	0.00

The adjusted r-square for the Major and Career Support Factor was .128 which suggests that 12% of the variability of the *Major and Career Support Factor*. Although not large in the absolute sense, it does indicate a relationship between the Academic Personal Development factor and having a good mentor.

From these three regressions with the dependent variable *Having A Good Mentor* and the three independent variables; 1) *Academic And Personal Development*, 2) *Social And Academic Integration* and 3) *Major And Career Support* demonstrate that *Having A Good Mentor* is a significant predictor of these 3 outcome factors for a success course.

Therefore, having a mentor with the characteristics outlined earlier in the classroom can help students become more engaged in their college experience through activities that will enhance their *Academic And Personal Development, Social And Academic Integration, and Major And Career Support*.

The final two regressions that were conducted for the two peer mentor outcome factors and *Having A Good Peer Mentor* also showed a significant positive correlation. *Having A Good Peer Mentor* is a significant predictor of *Psychosocial Support* (Table 4.21). The *Psychosocial Support* factor included variables such as *Improved My Self-Confidence, Helped Me Learn About Campus Resources, Helped Me To Stay At The University, Helped Me To Meet With My Faculty Members And Helped Me To Set Future Goals*. From this regression analysis and the variables included in this factor it seems that the peer mentor helps the student personally through adjusting to the university and helping them learn about the different support mechanisms on campus.

The adjusted r-square for the Psychosocial factor was .500 which suggests that 50% of the variability of the *Psychosocial factor*. This is a larger r-square and indicates a relationship between the Psychosocial Factor and having a good mentor.

Table 4.21 Psychosocial Support Factor Regressing on Having a Good Peer Mentor

	Unstandardized Coefficients	Std. Error	Beta	Standardized Coefficients	t	Sig.
(Constant)	-0.85	0.35			-2.44	0.02
A Good Peer Mentor**	0.99	0.06	0.71		16.03	0.00
Ethnicity1	0.11	0.12	0.04		0.95	0.34
Gender	0.05	0.09	0.02		0.49	0.63
Are you a first generation college student	-0.12	0.12	-0.06		-1.01	0.31
Fathers Highest Level of Education Completed	-0.04	0.02	-0.09		-1.71	0.09
Mothers Highest Level of Education Completed#	-0.01	0.03	-0.02		-0.37	0.71
What is your cumulative GPA in college	0.02	0.04	0.02		0.56	0.57
Type of Institution	0.01	0.08	0.01		0.12	0.90

a. Dependent Variable: Psychosocial Support Factor (peer mentor) **p<.01

The second regression between *Having A Good Peer Mentor* And *Academic And Career Support* also showed a significant positive relationship which demonstrates that *Having A Good Peer Mentor* is also a significant predictor of *Academic And Career Support* for the student. The *Academic And Career Support* factor included variables such as *Provided Me Info About My Career Decisions*, *Improved My GPA*, *Helped Me Seek Advising Services*, *Helped Me Seek Tutoring Services*, and *Helped Me With My Major Choice*. Therefore, having a peer mentor helped students both with their academic development and obtaining academic support through a variety of resources and choices related to their major and career. Table 4.22 shows the regression for this factor.

Table 4.22: Academic and Career Support Factor Regressing on Having a Good Peer Mentor

	Coefficients ^a			t	Sig.
	Unstandardized Coefficients	Std. Error	Standardized Beta		
(Constant)	-0.83	0.37		-2.26	0.02
A Good Peer Mentor**	0.75	0.07	0.59	11.40	0.00
Ethnicity1	0.16	0.12	0.07	1.28	0.20
Gender	0.11	0.10	0.06	1.11	0.27
Are you a first generation college student	0.04	0.12	0.02	0.35	0.73
Fathers Highest Level of Education Completed	0.00	0.02	-0.01	-0.14	0.89
Mothers Highest Level of Education Completed	0.00	0.03	0.00	0.07	0.94
What is your cumulative GPA in college Please select choice fr	-0.01	0.04	-0.01	-0.16	0.88
Type of Institution**	0.35	0.09	0.23	4.02	0.00

a. Dependent Variable: Academic and Career Support

The adjusted r-square for the Academic and Career Support Factor was .314 which suggests that 31% of the variability of the *Academic and Career Support Factor*. This r-square is also larger than the previous and it does indicate a relationship between the Academic and Career Support Factor and having a good mentor.

I also conducted a regression for Having a Good Peer Mentor and student's college GPA. There was no statistically significant results. It did not demonstrate that there is a relationship between having a good peer mentor and a high academic GPA.

Cross-Tabulations

As mentioned in the success course analysis, participants were asked to identify activities that they believed contributed to their college student success. Cross

tabulations between these activities and peer mentor outcomes that participants were asked to identify earlier in the survey were conducted. There were six activities that were related to the outcomes for the peer mentor. Table 4.23 shows the six activities and six outcomes that were used in the cross tabulation.

Table 4.23
*Items used for cross tabulation with
Peer Mentor Outcomes*

University Activities That Contributes to College Student Success	Peer Mentor Outcomes
Having access to financial aid	Helped me with financial issues
Having a peer mentor	Contributed to my success as a college student
Meeting with an academic advisor	Helped me to seek advising services
Getting involved in research	Helped me learn about internship and research opportunities
Using tutoring services	Helped me to seek tutoring services
Getting involved in a club or organization	Helped me to get involved on campus

Table 4.24 shows the cross tabulation between *Having Access To Financial Aid* and the peer mentor *Helped Me With Financial Issues*. This table indicates that the majority of students agree that having access to financial aid is important for their college student success but disagree that having a peer mentor helped them with financial issues. Therefore, in this outcome of *Helping With Financial Issues* the peer mentor did not influence the student's success in this way. Although *Having Access To Financial Aid* is important to the participant, the peer mentor did not provide any information or support to help the student financial issues such as financial aid, or money management.

Table 4.24

Having access to financial aid contributes to college student success * Peer Mentor Helped with Financial Aid Issues Cross tabulation					
			peer mentor helped with financial aid issues		
			Disagree	Agree	Total
having access to financial aid is important for my college student success	Disagree	Count	27	3	30
		% of Total	8%	1%	9%
	Agree	Count	249	54	303
		% of Total	75%	16%	91%
Total	Count	276	57	333	

Table 4.25 looks at the cross tabulation between *Participating In A Peer Mentor Program Contributed To Their Success* and if they believe that *Participating In A Peer Mentor Program Is Important To Their College Student Success*. The results for this cross tabulation show that 47% believe that peer mentoring is important to their college student success and that it contributed to their college student success. This is a little higher of percentage than the responses related to their success course. What is interesting here is that 12% did not agree that having a peer mentor was important for their college student success but agreed that their peer mentor contributed to their success. As we learned earlier the peer mentor's characteristics is a good predictor of the outcome factors mentioned earlier and the students who did not agree that the peer mentor did not contribute to their success are more likely to have had a peer mentor who did not have the characteristics that make them a good peer mentor. The perceptions of

their mentor can make a difference in the students' perspective on whether or not their peer mentor influenced their success in college.

Table 4.25

Having a Good Peer Mentor is Important for my College Student Success * Having a Peer Mentor Contributed to My Success as a College Student Cross Tabulation					
having a peer mentor contributed to my success as a college student					
			Disagree	Agree	Total
having a good peer mentor is important for my college student success	Disagree	Count	85	40	125
		% of Total	26%	12%	38%
	Agree	Count	52	156	208
		% of Total	16%	47%	63%
	Total	Count	137	196	333

Table 4.26 shows that forty-seven percent indicated that the peer mentor helped them to seek advising services and that academic advising is important to their college student success and forty-one percent indicated that it is important but that the peer mentor did not help them seek advising. A total of 88% of the participants believe that meeting with an academic advisor is important for their college student success. This result shows that participants were split in whether the peer mentor helped them seek advising services or not. Referring to the earlier analyses regarding peer mentor characteristics it is possible these results are split because students who had a peer mentor with the peer mentoring characteristics were more likely to meet with their academic

advisor because their peer mentor told them to do so. Peer mentor programs would need to ensure that this particular activity that is highly important to students is part of the peer mentor programming. The result of this cross tabulation was very similar for the success course.

Table 4.26

Meeting with an Academic Advisor is Important for My College Student Success* Having a Peer Mentor Helped me to Seek Advising Services Cross Tabulation					
having a peer mentor helped me to seek advising services					
			Disagree	Agree	Total
meeting with an academic advisor is important for my college student success	Disagree	Count	30	9	39
		% of Total	9%	3%	12%
	Agree	Count	137	157	294
		% of Total	41%	47%	88%
	Total	Count	167	166	333

Table 4.27 shows that sixty-five percent of the participants indicated that getting involved in research was important for their college student success. However, 22% of the 65% percent who said it was important indicated that the peer mentor did help them learn about research opportunities while 43% said that they did not. The possibility for this result is that the focus on getting involved in research and internship experiences is usually encouraged in a students' sophomore or junior year. Since the interaction with their peer mentor was during their first-year experience class it is possible that there was not a focus or encouragement for students to consider research and internship opportunities in their freshmen year and that may be why students did not learn about this

from their peer mentor. Also, although 65% indicated that getting involved in research is important for their college student success at the time the students took the survey they were in their third semester in college and it is possible that at this stage in college they have begun to learn then engaging in research opportunities are important. However, because students should begin becoming involved in research opportunities during their sophomore and junior years, the peer mentor should be alerting students to this information during their first-year in college so that they have the knowledge of what they should be doing in their second and third year.

Table 4.27

Getting Involved in Research is Important for My College Student Success* Having a Peer Mentor Helped me Learn About Research and Internship Opportunities Cross Tabulation					
having a peer mentor helped me learn about internship and research opportunities					
			Disagree	Agree	Total
getting involved in research is important for my college student success	Disagree	Count	98	18	116
		% of Total	29%	5%	34%
	Agree	Count	143	74	217
		% of Total	43%	22%	65%
	Total	Count	241	92	333

In table 4.28 the table shows that seventy-seven percent agreed that using tutoring services was important for their college student success while forty percent indicated that the peer mentor did not help them seek tutoring and thirty-seven percent said that it did.

Table 4.28

Using Tutoring Services is Important for My College Student Success* Having a Peer Mentor Helped me to Seek Tutoring services Cross tabulation					
having a peer mentor helped me to seek tutoring services					
			Disagree	Agree	Total
using tutoring services is important for my college student success	Disagree	Count	54	20	74
		% of Total	16%	6%	22%
	Agree	Count	134	124	258
		% of Total	40%	37%	77%
Total	Count	188	144	332	

Tutoring is another highly important activity to students and the peer mentor is not providing the information to help the student seek these services.

Seventy-five percent indicated that getting involved in a club or organization is important to their college student success and about the 39% of them indicated that the peer mentor helped them to get involved on campus and 36% said that it did not (table 4.29). Through their interactions and experiences some peer mentors helped their students get involved on campus while others did not. There seemed to be a split response to this category as well. Part of it could be due to the characteristics of the peer mentor and if the student had a good peer mentor then they would learn about involvement opportunities and actually get involved. The qualitative interview will give us more insight as to why some students felt that the peer mentor didn't help them get involved in on campus programs or the other responses that are being evaluated here.

Table 4.29

Getting Involved in a Club or Organization is Important for My College Student Success* Having a Peer Mentor Helped me to Get Involved on Campus					
			having a peer mentor helped me to get involved on campus		
			Disagree	Agree	Total
getting involved in a club or organization is important for my college student success	Disagree	Count	52	31	83
		% of Total	16%	9%	25%
	Agree	Count	121	128	249
		% of Total	36%	39%	75%
	Total	Count	173	159	332

These six cross tabulations help us to identify if the peer mentor helped the student achieve certain outcomes and if activities related to those outcomes are important to the student for college student success. The cross tabulations demonstrate that the peer mentor did not help students with financial issues while *Having Access To Financial* was rated as the most important activity for success by the students in this study. The second highest important activity for students was *Meeting With An Academic Advisor*, students were split on whether the peer mentor helped them to meet with their academic advisor. The same was true for *Helped Me To Use Tutoring Services* or *Helped Me To Get Involved In Clubs Or Organizations*. These findings suggest that peer mentors are not always producing the student outcomes that the students themselves find to be important for their own success. Some of these outcomes are lacking in the communication from the peer mentor to the student. The results from the six cross

tabulations for the peer mentor outcomes are very similar to the cross tabulation results for the success course outcomes.

Research Question Four:

How and to what extent do peer-mentoring and first-year success courses compare with each other in influencing college student success?

In order to see if first-year success courses with peer mentoring has any different impact on the success course outcomes than a first-year success course without peer mentoring an independent t-test was conducted. Table 4.30 and 4.31 shows the difference in the means of four outcomes in the success course that are statistically significant. This includes the following outcomes: 1) *Helped Me To Meet With My Faculty Members*, 2) *Allowed Me To Have Someone To Talk To About Social Life*, 3) *Improved My Gpa* and 4) *Helped Me To Meet Other Students*.

Table 4.30
Group Statistics From Independent Samples Test

	Peer Mentor	N	Mean	SD
Outcome from Success Course				
Helped me to meet with my faculty members	No	69	2.32	0.85
	Yes	348	2.60	0.99
Allowed me to have someone to talk to about social life	No	69	2.14	0.93
	Yes	348	2.48	1.01
Improved my GPA	No	68	2.91	0.91
	Yes	346	2.66	1.02
Helped me to meet other students	No	69	3.06	0.82
	Yes	349	3.22	0.89

Table 4.31
Independent Samples T-Test, Grouping Variable Peer Mentor or No Peer Mentor

Outcome from Success Course	Levene's Test Equality Variance		t-test for equality of means			
	f	Sig.	t	df	2-t	MD
Helped me to meet with my faculty members	EVA	0.04*	-2.23	415	0.03	-0.28
	EVNA		-2.47	108	0.02	-0.28
Allowed me to have someone to talk to about social life	EVA	0.03*	-2.52	415	0.01	-0.33
	EVNA		-2.67	103	0.01	-0.33
Improved my GPA	EVA	0.01*	1.86	412	0.06	0.25
	EVNA		2.00	103	0.05	0.25
Helped me to meet other students	EVA	0.05*	-1.40	416	0.16	-0.16
	EVNA		-1.48	102	0.14	-0.16

Note: EVA = Equal Variances Assumed, EVNA = Equal Variances Not Assumed,

MD = Mean Difference, 2-t = Significance 2 - tailed, *p < .05

The independent samples *t* test compared the mean score of outcomes for the success course with a peer mentor component against the success course without the peer mentor component. The comparison between 4 of the 21 outcomes were found to be statistically significant. The mean score for *Helped Me To Meet With My Faculty Mentor* for students with a peer mentor (M = 2.6, SD = .99) and those without a peer mentor (M = 2.32, SD = .85) was statistically significant (p < .001). This result indicates that participants who had a peer mentor felt like the success course helped them to meet with faculty members at a slightly higher level than those who did not have a peer mentor. This result can be due to the peer mentor's experiences and telling students about the importance of meeting with faculty members and how it benefited them and therefore having a peer mentor in the success course sharing these experiences then students would be more likely to meet with their faculty members. The mean score for *Allowed Me To*

Have Someone To Talk To About My Social Life for those with a peer mentor (M = 2.48, SD = 1.01) and those without a peer mentor (M=2.14, SD .93) was statistically significant, $p < .001$. This result indicates that participants who had a peer mentor felt like the success course allowed them to have someone to talk to about their social life at a slightly higher level than those who did not have a peer mentor. Fifty-three percent of the participants who had a peer mentor met with their peer mentor outside of class, this opportunity probably allowed the mentee to be able to talk with their peer mentor on an individual basis about things outside of their academic experiences. Participants who did not have a peer mentor may not have had the opportunity to talk about personal experiences or their social life while in the classroom and that is why there was a significant difference. The mean score for *Helped Me To Meet Other Students* for students with a peer mentor (M = 3.22, SD = .89) and those who did not have a peer mentor (M=3.06, SD .82) was statistically significant $p < .05$. This result indicates that participants who had a peer mentor felt like the success course allowed them to meet other students at a slightly higher level than those who did not have a peer mentor. With peer mentors in the classroom and meeting with students outside the classroom, they had the potential of talking with student more about getting involved in events and meeting others. Finally, the mean score for *Improved My Gpa* for those who had a peer mentor (M=2.66, SD =1.02) and those who did not (M=2.91, SD = .91) was statistically significant, $p < .001$. This result indicates that participants who had a peer mentor felt like the success course helped improve their GPA at a slightly lower level than those who did not have a peer mentor. It is possible that those students who didn't have a peer

mentor had more focus on their priorities regarding academics and thus were not distracted as much by opportunities of involvement or events that the peer mentors would talk about in class. The remaining 17 outcomes did not have a significant difference in their effects between those who had a peer mentor and those who did not (see appendix). It is surprising that the variables *Helped Me To Adjust To The University* and *Have Someone To Talk To About My Academic Life* did not have significant differences in the mean between students who had a peer mentor and those who did not. It would seem that for both of these variables students would feel that with a peer mentor they were better able to adjust to the university because they were able to communicate with someone regarding similar experiences. In addition, being able to talk to their peer mentor outside of class regarding any aspect of their college experience whether it be social or academic it is surprising that there was not a significant difference for those who had peer mentors to feel that they have someone they can talk to about their academic experience as well.

To see if the outcome factors that were identified from the factor analysis for the success course had a significant difference for those with a peer mentor and those without a peer mentor another independent t-test was conducted using the three success course outcome factors. The t-test did not show any significant differences between those who had a peer mentor and those who did not have a peer mentor (see table 4.32 and 4.33).

Table 4.32

Group Statistics for independent t-test success course outcome factors with or without a peer mentor

Success Course Outcome Factors	Peer Mentor in Success Course	N	Mean	Std. Deviation
Academic and Personal Development	No	67	2.64	0.69
	Yes	342	2.55	0.77
Social and Academic Integration	No	68	2.49	0.66
	Yes	348	2.65	0.75
Major and Career Support	No	69	2.18	0.79
	Yes	346	2.13	0.86

Table 4.33

Independent Samples T-Test for success course outcomes with or without peer mentor

Success Course Outcome Factors	Levene's Test Equality Variance	t-test for equality of means					
		f	Sig.	t	df	2-t	MD
Improved academic and personal adjustment SC	EVA	1.17	0.28	0.92	407	0.36	0.09
	EVNA			0.99	100.46	0.33	0.09
Utilize resources SC	EVA	0.77	0.38	-1.69	414.00	0.09	-0.17
	EVNA			-1.85	104.24	0.07	-0.17
Helped me with major and career SC	EVA	1.35	0.25	0.41	413.00	0.68	0.05
	EVNA			0.43	102.60	0.67	0.05

Note: EVA = Equal Variances Assumed, EVNA = Equal Variances Not Assumed,

MD = Mean Difference, 2-t = Significance 2 - tailed,

*p < .05

All students, regardless of whether they had a peer mentor or not, were asked to respond to a question regarding the effectiveness of peer mentor programs and first-year success course for college student success. Earlier we also discussed questions that asked

participants what activities they believed to be important for their college student success. In Table 4.34 the mean responses for four of these questions are demonstrated. Students were to indicate whether they agreed or disagreed with these statements. The variable that had the highest mean was *Peer Mentor Programs Are Effective For College Student Success* (M=2.83, SD=.83). The second highest mean was for *Having A Good Peer Mentor Is Important For My College Student Success* (M=2.69, SD=.87). The third highest mean was for *First Year Success Courses Are Effective For College Student Success* (M=2.58, SD=.93). Finally, the variable with the lowest mean was for *Participating In A Success Course Is Important For My College Student Success* (M=2.43, SD=.96) The finding here shows that students believe that the peer mentor program is both more effective and important for college student success than first-year success courses. Not all of these students had a peer mentor therefore it is based on what they perceive to be important or effective if they did not participate they don't have first hand experience.

Table 4.34

Effectiveness and Importance of Peer Mentors and First-Year Success Courses						
	t	df	Sig. (2- tailed)	MD	95% Confidence Interval of the Difference	
					Lower	Upper
Having a good peer mentor is important to my college student success	62.85	418	3.99	2.69	2.61	2.77
Participating in a success course is important to my college student success	51.22	416	9.19	2.43	2.33	2.52
Peer Mentor Programs are effective for college student success	70.07	416	1.95	2.83	2.75	2.9
FirstYear Success Courses are effective for college student suc	54.37	418	1.1	2.58	2.49	2.67

An independent t-test was run to see if there is any significant difference in the mean for students who had a peer mentor and for students who did not for the questions in table 4.35. When comparing students who had a peer mentor to those who did not for the two variables: *Having A Good Peer Mentor Is Important For My College Student Success* and *Participating In A Success Course Is Important For My College Student Success* there is a significant difference. The results in table 4.36 and 4.37 show that students who had a peer mentor believe that *Having A Good Mentor Is Important For My College Student Success* at a slightly higher level than those who did not have a peer mentor. The results also indicated that those students who did not have a peer mentor believe that *Participating In A Success Course Is Important For My College Student Success* at a slightly higher level than those who did have a peer mentor. However, there were no significant differences between students who had a peer mentor and those who

did not in regards to the effectiveness of a peer mentor program versus a success course. The means are relatively similar. This finding could be because those who did not have a peer mentor have a perception that peer mentor programs are effective for college student success even though they did not have one. In addition, whether they had a peer mentor or not they both had a success course and their perceptions about the overall effectiveness of first-year success courses is the same. Furthermore, in the results thus far there are specific outcomes that students feel the peer mentor and/or first-year success programs are helping with over other outcomes. Even though they have identified specific outcomes they may be attributed to the first-year success course or the peer mentoring, they seem to feel that overall both programs are effective.

Table 4.35

Group Statistics for Independent T-Test for importance versus effectiveness of peer mentoring and first-year success course				
	Peer Mentor	N	Mean	Std. Deviation
Having a good peer mentor is important to my college student success	No	66	2.60	0.69
	Yes	336	2.69	0.90
Participating in a success course is important to my college student success	No	66	2.60	0.85
	Yes	334	2.37	0.98
Peer Mentor Programs are effective for college student success	No	64	2.79	0.71
	Yes	336	2.82	0.83
FirstYear Success Courses are effective for college student suc	No	66	2.69	0.91
	Yes	336	2.54	0.98

Table 4.36

Independent Samples Test on Effectiveness and Importance of Peer Mentoring							
First-Year Success Courses							
		Levene's Test for Equality of Variances		t-test for Equality of Means			
			Sig.	t	df	Sig. (2- tailed)	MD
Having a good peer mentor is important to my college student success	EVA	4.76	0.03*	-0.74	400	0.45	-
	EVNA			-0.88	111	0.37	0.08
Participating in a success course is important to my college student success	EVA	4.06	0.04*	1.76	398	0.07	0.22
	EVNA			1.93	101	0.05	0.22
Peer Mentor Programs are effective for college student success	EVA	0.49	0.48	-0.24	398	0.8	-
	EVNA			-2.7	98	0.78	0.02
FirstYear Success Courses are effective for college student success	EVA	2.59	0.11	1.14	400	0.25	0.14
	EVNA			1.2	97	0.23	0.14

Note: EVA=Equal Variances Assumed, EVNA=Equal Variances Not Assumed

MD = Mean Difference, *p< .05

The analysis comparing peer mentor programs with first-year success courses has illustrated interesting differences in the outcomes. The top five outcomes for the first-year success course were: 1) *Helped Me To Meet Other Students*, 2) *Helped Me To Learn About Campus Resources*, 3) *Helped Me To Adjust To The University*, 4) *Allowed Me To Talk To Someone About Academic Life*, and 5) *Improved My Gpa*. The top five outcomes for the peer-mentoring were: 1) *Helped Me To Learn About Campus Resources*, 2)

Allowed Me To Talk To Someone About Academic Life, 3) *Helped Me To Adjust To The University*, 4) *Helped To Me To Set Future Goals*, and 4) *Allowed Me To Talk To Someone About Social Life*. Although, the top five are not ranked in the same order 3 out of the 5 variables are the same. In addition, the means for the first-year success course outcomes are higher than the means for the peer mentor outcomes (see tables 4.2 and 4.11)

In comparing the cross tabulations for the peer mentor and success course outcomes versus the activities that students found were important for their college student the results were very similar. Both the peer mentoring and the first-year success course did not help students with financial issues while *Having Access To Financial Aid* was rated as the most important activity for college student success. For the variables *Meeting With An Academic Advisor*, *Using Tutoring Services*, and *Getting Involved In Research* as important activities for college student success, students felt that these three were important for their success but the results showed that the students were split on whether the peer mentor program or the first-year success course helped them to seek these services or opportunities.

The results did show that there were three variables in which students who had a peer mentor felt that the success course helped them at a slightly higher rate than those who did not have a peer mentor. These variables included: 1) *Helped Me To Meet With My Faculty Members*, 2) *Allowed Me To Have Someone To Talk To About Social Life*, and 3) *Helped Me To Meet Other Students*. In addition the results indicated that

participants who did not have a peer mentor felt like the success course *Helped Improve Their GPA* at a slightly higher rate than those who did have a peer mentor.

Finally, in question two we looked at how peer mentor characteristics influenced the outcome factors for the success course and the peer mentoring. There were stronger correlations between *Having A Good Peer Mentor* and the two peer mentor outcomes: *Psychosocial Support* and *Academic Career Support*, versus the success course outcomes: *Academic And Personal Development*, *Social And Academic Integration*, and *Major And Career Support*.

In the next section the qualitative analysis of the follow-up interviews will allow for a deeper understanding of the influences of first-year success courses and/or peer mentoring on college student success.

Qualitative Analysis

From the interviews one overarching theme emerged regarding both the first-year success course and peer mentoring. If the participant felt that the peer mentor was available, answered questions, provided information and met their expectations then they were more likely to indicate that the peer mentor was helpful. In addition, if the participant felt that the first-year success course provided them with information that was useful, and had appropriate and relevant assignments then positively influenced their transition. However, if the participant had a negative impression of their peer mentor or the first-year success then they felt it did not influence them in any way.. In this qualitative analysis I will report the findings on what students found helpful in terms of the outcomes that were presented in the quantitative analysis. Six of the 21 outcomes

were used to code the responses of the interviewees. The outcomes that were used in the coding were *Meeting Other Students*, *Campus Resources*, *Adjusting To College Life*, *Getting Involved On Campus*, *Improving Their GPA*, and *Contributing To Their Success As A College Student*. The interpretation of these outcomes will be followed by the results related to characteristics of the first-year success course and the peer mentor and how that influenced the perceptions of the interviewee regarding their transition and college experience.

Meeting Other Students

Overwhelmingly, interviewees indicated that both the first-year success course and the peer mentor provided them with opportunities to meet and network with other students. Through small class sizes and potential shared experiences the success course allowed students to get to know other students in a comfortable setting. One student stated: "I think it really helped me meet some new people and what not. Like some of the best friends I have are from that first year class that I had." The small classroom setting helps to reduce the anxiety of trying to go out and meet people on your own when you are in a new setting. Therefore, the first-year success courses fostered that connection with students and the activities in class helped the students to engage each other in conversation. Another student further explained:

Well we also had really small class sizes which I really enjoy having a smaller class size. I got to know people in the class more. I think it was probably the most beneficial part because I got to know people better. And we got to do activities

with them more often. We got to do outside events so we got to become more friends than just other classmates.

Many students felt that the class helped them to meet other students and that it was the best part of the first year experience. It provided students with a built-in support system as they all transitioned into college together:

I think the best part of the program was the fellow students especially because we had several classes together. It was just nice to have them and to get to know them. That was probably the best part was having the support of several people in my classes, plus one of the guys I was living with, so that helped.

As did the success course, the peer mentor also fostered the opportunity for students to meet other students and network. The mentor encouraged their mentees to get involved on campus through different events and activities, which in turn helped them to meet other people. One participant shared “I think she helped me get to know more people. Instead of just coming to college like I don’t know anybody this is horrible. I actually met people and went out and did things instead of sitting in my room.” Having a peer mentor helped students engage in activities outside of the classroom which naturally allowed for interaction with other students in their classes and outside of their classes. “She (peer mentor) would tell you about just different things on campus that you can do to get involved and to meet new people. Also just talking with new people and getting to know new people.” The notion of being connected with others is important to the first-year transition as participants mentioned it helped them to not be alone and to make friends in a non-threatening environment. For many students it seemed that the peer mentor

encouraged them to go to events on campus. In addition, in some courses students were required to attend a certain number of events. Both of these aspects provided students with the opportunity to meet other students.

Knowledge About Campus Resources

The second theme from the interviews was learning about campus resources. Participants referred to the first-year success course more than the peer mentor in terms of learning about campus resources. If the course was focused on the first-year transition it either offered information in the class or activities related to campus resources for students. They described different class activities or assignments that helped them to become more knowledgeable about the resources available on campus to help them academically. In one class the student describes a weekly activity they did to learn about resources, “The class was really good we did an activity every week for like one month we did a scavenger hunt find this building, find that building and whoever returned first won, and so it was like really getting to know the campus.” Another student explained that the way she learned about resources in her class was through different speakers. This helped her to really learn about what was available on campus but also for her to help other students who were not as familiar with all of the campus resources. She explained:

I learned a lot about campus resources we had speakers for everything they came and talked about the services available. I still use the knowledge that I learned about the class when people have questions about things. I know all the answers. I know what every building has in it. I moved back into the dorms (this year) and

my roommate was very unfamiliar with things and because of my knowledge I was able to help her a lot, all from my first-year seminar class.

The peer mentors also provided information about campus resources to their mentees as well but a majority of the participants indicated that they learned this information through speakers in their success course or activities than they did in class. Peer mentors would also provide information to students in the form of handouts. One student said that her mentor shared information about one resource each time they met. “Oh yeah um at least one resource a day I would say and he would just pretty much explain it to us, explain what it was about and then if we weren’t interested. Every now and then I use the resources.” Students learned about the resources and also used them when they needed to.

The information that students learned about campus resources helped them to know more about both academic and social resources to help them get involved on campus. Without the success course some students indicated that they would be lost or that it would have taken them longer to learn about the resources on their own. Therefore, being able to learn about the resources helped them to navigate their way through the university with a little more ease.

Adjusting to College Life

The primary goal of first-year experience programs that include first-year success courses and peer mentoring is to help students adjust and transition into college life. Students indicated in their interviews that both the first-year success course and peer mentoring helped them to adjust to their new experiences in college. One of the ways

programs can help students adjust to college is to help them with managing their time and developing the skills to use their time more effectively. Both the success course and the peer mentor helped students in this way. In some classes time management was the primary focus. One student shared their experience with time management activities in class which helped him to improve his time management skills.

The class was mostly on time management and how we should build a time management budget to start helping you live on your own. The time management was a really good thing because I'm kind of a procrastinator as well. So one of the assignments was we had to make a schedule for ourselves like hour-by-hour schedule day-by-day schedule for an entire week and then um stick by it. That one really helped to realize about how much time I sometimes waste just sitting around playing video games or watching TV.

Managing time is a key ingredient in being successful and having a positive and smooth transition into college. Using time effectively and efficiently helps students to adjust to the new way of scheduling their classes and the larger amounts of free time they have compared to high school. Beyond time management the class also helped students to learn the difference between high school and college and what to expect as they begin this new experience of education in college. One student talks about how the class helped her in this transition and to understand some of the differences and what to do.

I was able to learn about all the things you don't necessarily have in high school that you have in college like office hours, having to have study sessions, and buying your books and all that good stuff a lot of things you don't necessarily

have to worry about in high school was taught to us, if you didn't already know the information, in my class. So I could really appreciate that.

When a student was asked how different their first year would have been if they weren't enrolled in the first-year success course they indicated that it would have made them have a more challenging transition into college.

(The success course) was very interesting they had to do some examples of college papers and we had to do some activities to get involved on campus so we take tours around so the class helped me to get more integrated into campus life. It was helpful. It allowed us to get a taste of what was expected in college. What the rules and guidelines are and I think if I hadn't taken that class I wouldn't have transitioned so well I might have had a more difficult transition. I probably would have struggled a little bit more if I didn't take the class.

Several other students also indicated that if they hadn't taken the course that their transition would have been more difficult, that it would have taken them longer to learn about the resources and they wouldn't have met as many students. They also indicated that the transition would have been more challenging. The following student stated:

I think I would be really lost. They guided me through basically everything you need to know about college and what you needed to do. What classes you need to take, how you get involved. Basically everything you need to survive your first-year and the use the material and going on and using it in the following years.

In addition, students have to adjust to the new environment, new experiences, different study expectations, and being away from their family. Participants indicated that their

peer mentor helped them to adjust to these new experiences by being there for them and providing a safe and comfortable environment where they could share their concerns.

One student who was challenged with family issues explained: “They really made me just feel comfortable being here and like I was meant to be here, for example, they let me talk to them whenever I needed to and ask any questions whenever I needed. I had a really rough time with family issues my first year they talked me through it and they helped me to continue with classes and continue being successful.” Having a non-judgmental person who has recently experienced the transition helps the student feel like they can be successful too. Another student talks about being homesick and how her peer mentor helped her through that challenge, “She was very nice to all of us and tried to include everyone so I didn’t feel like I’d been left out or anything like that. She helped out a lot with me not being sad about leaving home like ‘here are all these great things you can do’ and can enjoy in college. She helped me because I was homesick.” The peer mentor provided the participants with someone who has been in their shoes and can was able to relate to their experience. This is very beneficial to students who are new to the college experience in helping them with their transition and adjustment to college. “I thought it was a good idea to have a student in the class to provide that perspective from a person who has been there and kind of knew what we were going through and kind of see how things should be so I think it was a good idea.” Students appreciated having someone close to their age that was not far removed from the experience share their insights and offer advice as they began their transition into college. The peer mentor and first-year course seemed to help these students in particular with their transition and adjustment to

college. What is important is that the student knew someone who has recently been through the experience whom they can relate to and share information with and therefore can provide suggestions or advice on how to deal with the challenges or issues that arise.

Getting Involved on Campus

The third theme was getting involved on campus. Overwhelmingly the participants referred to their peer mentor as promoting their involvement on campus rather than the success course itself. Students indicated that their mentor would regularly remind them of events on campus or share information about clubs and encourage them to become involved and participate in the events that were on campus. One participant shared what her peer mentor did to get them all involved on campus:

I think the peer mentor did a fairly good job at that. They did help and like gave us a list of everything on campus ‘I’ve been to this it’s really fun you should go.’ She had a couple of programs for us getting us go to activities that she thought would be fun.

Peer mentors encouraged their mentees to get involved in activities that they are interested in or clubs that they would like. One student mentioned how her peer mentor helped her join a club that she was interested in based on information her peer mentor had passed on to her.

He would let us know about service projects that were going on, organizations and clubs we could join. So that was very helpful. I went to a couple and I ended up joining the fencing club. So that was helpful to know about those things, since I don’t know if I would have known about them otherwise.

Peer mentors regularly provided information to students about different events and potential clubs that mentees could join. Regularly sharing this information can increase the likelihood of another student going out and getting involved. One student reflected on how her peer mentor helped her to get involved in an opportunity and she also moved into a leadership role.

Oh yeah (peer mentor name) definitely helped me get involved on campus I applied for the first year seminar leader when I was a freshmen, but I didn't get it. But I was a fall welcome leader for students who were not in the (first-year success) class. I also got involved an organization on campus (name of school) non-judgmental free safe rides home to kids around campus and she was part of that organization when she was here and then actually my 2nd semester in my first year I got accepted onto their e-board and I was on their e-board for a semester she helped me find my leadership potential and help it grow.

Peer mentors seem to play a pivotal role in encouraging their mentees to get involved on campus. The peer mentor also serves as a role model many participants said they got involved with a club or organization that their peer mentor was in as well. Mentees are more likely to listen to their peer mentor who is closer to their age and recently went through the same experience. Mentees are encouraged to get involved and be connected like their peer mentor.

Improving their GPA

Participants indicated that the first-year success course and the peer mentor helped them improve their grades. One student shared that because her peer mentor

helped her get more organized that improved her grades, “Like I mean right now I have a planner and I’m doing better like sticking to things and my grades improved and that’s because of her example.” When asked how her first year experience would have been different if she did not have a peer mentor one student stated that her peer mentor encouraged her to meet her professor and that helped her to improve a grade in a specific class.

I certainly know that one grade in my one class would have been significantly lower if I hadn’t have talked to the professor. I might not have wanted to get myself organized it would have taken a lot longer as I was not like that naturally. Like I said I had a really good peer mentor she was a really great example and I used that to form my own kind of system she suggested different ways how I could you know use different methods. Stuff that applied to me just for me that could work for me because everyone is different. (If I didn’t have a peer mentor) It would have just taken a lot longer and I really wouldn’t have known how to do it.

Another student shared that the course helped him to improve his grades. “I think my grades on the whole would have been a lot lower (if I hadn’t taken the course) because I would have wasted a lot of time than what I did. Just doing whatever.” Because the course and the peer mentor provided information about how to be a successful student in terms of academic skills and time management then students perceived that it helped them to improve their grades in their other classes.

For these students both the first-year success course and peer mentor helped them to improve their grades. It is clear that for many students the peer mentor can offer the following support to help improve their GPA 1)encouragement to meet with faculty, 2)providing information about different academic resources, and 3) serving as a role model by demonstrating how they are successful.

Contributing to their College Student Success

Participants also felt that the course and peer mentor contributed to their college student success in general.

It helped me to know how to be a successful college student it really helped because I didn't you know. You don't have to go to classes if you don't want to. My grades started slipping my professor and peer mentor every day we would go around in classes how are you doing in classes and I would tell everybody my grades were slipping and they helped me to get a good schedule with homework and how to get my grades going again it was very helpful.

By having someone check-in on her regularly through the class this student was able to change her situation and do better in her classes. The class contributed to her success because they listened to her challenges and provided her with strategies to improve her academic situation.

Another student felt strongly about the benefits of having both a success course and a peer mentor. In general the student refers to the guidance that is provided by the peer mentor and getting answers to questions to help her along the way.

I think it was very helpful I think every student going into college should take this class and have this mentor guiding them along just because they can answer any questions about any problems that they have. It was very very very helpful I can't stress that enough.

When referring to her peer mentor one student says that even though her peer mentor has graduated she still has influenced her continued college success. "Yes I mean (peer mentor name) left I've definitely learned a lot from her as far as like what you need to do to become a successful student." These students believe that the guidance provided by both the course and the peer mentor contributed to their success as a college student in general. The strategies that the peer mentors shared with them in meetings and during class helped them to be able to balance their schedule and develop the academic skills to be successful.

In addition to these six themes that arose from the responses to the interviews, the characteristics of the first-year success course and peer mentor also determined whether the participant found either to be helpful or have any influence on their progress in college. I will first address their perceptions of the success courses followed by the peer mentoring relationship.

First-Year Success Courses

An interesting finding from the interviews showed that if the course focused on the transition and provided students with new knowledge about resources or self-development then the participant felt that it influenced them. For example the following student stated:

I guess the class was able to help me to understand I mean we were already taking our other class it was more like a transition class it helped us to kind of figure out what to do in all of our other courses. It taught us about how to write papers, how to email your professors and going to office hours and things like that. I was able to learn about all the thing you don't necessarily have in high school that you have in college like office hours having to have study sessions and what not and buying your books and all that good stuff. A lot of things you don't necessarily have to worry about in high school was taught to us if you didn't already know the information in my class. So I could really appreciate that. Like I said resources going to the library and learning how to use the system. Going to events that taught you about your major or careers or internships or things like that. Also, networking with the peers in my class like a lot of them lived in the same area that I did because of the special class that I had a lot easier to maintain relationships you have in class with them and all that.

This student explains that the course focused on the transition and provided her with new knowledge that help her to navigate the university and learn about resources all of these led then to her involvement on campus, self-management and meeting other people. She continued to say the following:

I had a lot of students in my class that I'm still connected with like we have a class together or we work together or hang out because that's the type of class it was.

This student feels that the course was relevant and useful therefore it allowed her to feel like the course was beneficial and helped her with many aspects that are important for the transition and adjustment to the college experience.

For other students the seminar course was not helpful. They felt that the course didn't provide them with the information that would be helpful in the college process.

I didn't like the class. I didn't like it. We were doing simple things like learning how to read a syllabus and you know we are university students. Not all of us have our act together but we know how to read a syllabus and things like that and I don't even remember a lot of the assignments. I didn't feel they were very useful it made me feel less of a university student and a lot of students, many of my peers, felt like it was a waste and so we liked our peer mentor but not the first year course. We just we didn't like it.

The content of the course and how it was taught had a lot to do with the perception of the student and if they found it to be helpful. In this particular instance the student felt like the course was not relevant and did not provide any useful information or assignments for a first-year experience class. When asked the question "How different do you think your first-year experience would have been if you didn't have a first-year success course?" students provided different responses based on their perception of the usefulness of the course. If the course didn't provide them with new knowledge and was what they referred to as mostly "busy work" they would indicate that their first-year experience may have actually been better because they would have had the opportunity to take another course that would count towards their degree requirements. Students who found

the course useful indicated that they would have been lost without the course and one student indicated that she thinks she may not have stayed at the university without the support and information that was provided in the course.

Another student also, did not feel like the course was useful. The student stated; I actually think that I didn't have to take that class I could have taken something else that I might have learned something that I would have kept until now. It seemed like a waste of time. You could learn everything a different way instead of taking a class like that. A lot of the stuff that we did was useless. It would have been more useful if it went to general education or major curriculum. A lot of, sort of, useless writing assignments for a class.

In general if the course provided new knowledge, relevant assignments and the opportunity to meet other students in a smaller setting then it more likely contributed to the success of the participant. If the course did not have relevant assignments, busy-work or information that the student already knew they found the course to be "a waste of time".

Peer Mentoring

In terms of peer mentoring participants who indicated that if their peer mentor took a genuine interest in them, took time to get to know them and were present in class that they provided support that helped to influence their success. If the participant didn't perceive the peer mentor in this way they were less likely to say that the peer mentor was helpful. However, some did acknowledge that they didn't have as positive a relationship but that the peer mentor was still helpful.

I was expecting more time with them and more one-on-one conversations. Maybe it was just the person that I had but he wasn't as open as I was expecting so I didn't feel as comfortable talking to him. He was still helpful in lots of ways but it was a little disappointing because it wasn't what I was expecting.

Another student indicated that the least helpful aspect of the first-year course or peer mentoring was the peer mentor because it wasn't what they expected and that he wasn't as helpful or influenced her in anyway however, she indicated later that her peer mentor told them about service projects and organizations in class and that she joined a club based on the information her peer mentor provided and that she wouldn't have known otherwise. Although this student and a few others mentioned that their peer mentor didn't influence them or help them in any way they all seemed to indicate that they did get involved in something or made a decision based on information from their peer mentor. In the conversations with these students, even though the peer mentor may have had a small influence on getting involved on campus they dismissed this help fairly quickly if they had a negative relationship or experience with their peer mentor.

For other students the peer mentor was described as being helpful and the majority of the twenty students that were interviewed felt that the peer mentor component of the course was helpful based on the characteristics of their mentor.

I liked the peer mentor and she was available. She was a person who was meant for that you know some people just aren't. So when they hire peer mentors they should not just look at grade point average and you know experience but really get to know the student a bit more somehow. Just because a lot of them just as

college students we see things some times as a job and we are so stressed on time but they need to find people like my peer mentor you know just that personality that willingness to help others.

She goes on to say how the peer mentor influenced her as a college student:

She influence me to be more, to manage my time better and to really learn that it's not just time management its self management um she was extremely organized you know she had two planners and things were planned out and she really had a good head on her shoulders and I took that with me and it took a little while to implement but I wanted to be like that. I wanted to be more organized and to be more disciplined and to really be engaged in my school work and that's how she like inspired me to do those things. Like I mean right now I have a planner and I'm doing better like sticking to things and like my grades improved and that's like because of her example. I could really tell she was a very organized person.

Many of the students indicated that their peer mentor influenced them and served as a role model. They made decisions on classes to take or programs to get involved based on the information their peer mentor provided to them not just because they were their peer mentor but because their peer mentor took the time to get to know them and understand their mentee's interests.

They (peer mentor) really made me just feel comfortable being here and like I was meant to be here for example they let me talk to them whenever I needed to and ask any questions whenever I needed for one of my I had a really rough time with

family issues my first year they talked me through it and they helped me to continue with classes and continue being successful.

The amount of time that the peer mentor and mentee met outside of class and the quality of that meeting also seemed to make a difference for students.

I heard from other people that there peer mentors you know weren't so much involved kind of like not really there didn't make themselves too available but she was just very sincere and I knew that she was very busy but no matter what she would put in time for you. You just had to ask her and even if you wouldn't asked her she would make sure to ask you if everything was okay she would even like sometimes she would sit with us during our courses and things like that as long as you have a peer mentor who was like that then they are very valuable assets.

Participants knew of others who had peer mentors and did not have as positive of a relationship. The peer mentoring relationship didn't seem to help their friends. However, from their experience if the peer mentor made an honest effort to get to know them and were more present in the class and outside of the class it helped contribute to the mentee's involvement on campus, their decision making and meeting other people. The peer mentors generally would find a way to foster that inside and outside of the classroom.

These interviews helped to understand the reasons why students indicated whether or not the first-year success or peer mentors were helpful. If the course provides opportunities for new knowledge and to enhance the students' transition from high school to college, it seems to make a difference whether they will take information from their

course and apply it to their college experience. In addition, the peer mentor's characteristics such as *Friendly, Honest, or Good Listener* and the quality of the relationship seem to play an important role in its influence on students' transition and success in college.

Quantitative and Qualitative Analysis Comparison

The qualitative analysis supports some of the findings in the quantitative analysis. In the qualitative analysis the findings indicated that the students' perceptions of their peer mentor in terms of their characteristics determined whether the peer mentor was helpful and provided them with any information that was useful for them. For those who had a negative relationship with their peer mentor or felt that the peer mentor did not meet their expectations then they didn't find that their peer mentor was helpful. However, those who felt that their peer mentor fulfilled their role were indeed helpful and provided them with information on campus resources, helped them to meet other students, and helped them to adjust to the university. In the quantitative analysis, the findings also indicated that if a participant had a good peer mentor with all of the peer mentor characteristics then they were more likely to help them with their *Academic And Personal Development*, their *Social And Academic Integration*, and *Career And Major Support* which were the success course outcome factors identified in the factor analysis. It is also demonstrated that *Having A Good Peer Mentor* helped participants with *Psychosocial Support* and *Career-Academic Support* which were the peer mentor outcome factors.

Additionally, the qualitative analysis allowed for themes to emerge that indicated that the first-year success course and peer mentoring helped with the following: *Meeting Other Students, Learning About Campus Resources, Adjusting To College Life, Getting Involved On Campus, Improving Their GPA, and Contributing To Their Success As A College Student. Meeting Other Students, Learning About Campus Resources, Adjusting To The University, and Improved My Gpa* were in the top five of the outcome factors for students regarding their first-year success course. Therefore, the qualitative analysis showed that some students had examples of how the success course helped them in these ways and it matched what they indicated in the online survey

For some students however, the success course fell short of demonstrating these outcomes. In the cross tabulations in the quantitative analysis, students responses demonstrated that the first-year success course did not help them with financial issues while *Having Access To Financial Aid* was identified by the participants as the most important activity for their college student success. In addition, the cross tabulations also demonstrated that half of the students felt that the first-year success and peer mentoring did not help them to seeking tutoring services, seek academic advising, get involved in a club or organization. In the qualitative analysis participants did not indicate that their peer mentor or first-year success course helped them in any way to seek tutoring or advising services. They did mention however that their peer mentor helped them to get involved in a club or organization. Therefore, both the first-year success course and peer mentor program are not meeting the needs of the students as they indicated that these three activities are important for their college student success yet not all of them feel that

the success courses or peer mentoring is helping them to seek these necessary services that will contribute to their college student success.

In addition, learning about campus resources and adjusting to the university were also in the top five of the peer mentor outcomes. The qualitative analysis supported aspects of the participant's responses from the online survey in regards to both the first-year success course and peer mentoring. However, not all of the students had a positive experience in regards to the success course or the peer mentor and therefore the structure, curriculum and programming aspects for the first-year success courses and peer mentoring should be reviewed for each institution to see if they are supporting the indicators of student success from the perspective of the student as well as the institution..

Summary

This chapter provided an overview of the results of both the online survey and the follow-up phone interview. This chapter revealed the top five definitions of college student success chosen by students, the most common outcomes for the first-year success course and peer mentoring, the relationship between peer mentor characteristics and outcome factors for both the first-year success course and peer mentoring, and how first-year success courses and peer mentoring compare in their influence on student outcomes. Qualitative results were included and helped to support the some of the quantitative findings.

In summary the results of the online survey demonstrated that students define college student success in regards to developing themselves and knowing who they are as a person. In addition, graduating from college is an important factor in college student

success. Both the first-year success course and peer mentoring help students achieve certain outcomes related to their adjusting to their first year in college, meeting other students, and learning about campus resources. First year success courses also seem to help students in improving their GPA and peer mentors help students to think about their future by setting goals. In addition, first year success courses and peer mentors seem to fall short in helping students to seek academic support services such as academic advising and tutoring which they believe to be important for their college student success. In addition, neither program helps student with their financial issues even though students indicated that having access to financial is the most important activity for their college student success.

The characteristics of the peer mentor seem to have a strong relationship with student outcome factors related to both the first-year success course and peer mentoring. Students who were interviewed also supported this finding. If the peer mentor had the ten characteristics identified in the study and developed a positive friendly relationship with their mentee then the mentee found the success course and the peer mentor to be more helpful in the different outcomes related to the first year experience.

These findings help us to understand the perspective of the student in how they define college student success and their perception of how and if first-year success courses and peer mentoring contribute to what they believe to be important for college student success.

The next chapter, the discussion, will take what we have learned from this study in relation to previous research on college student success, first-year success courses, and

peer mentoring. It will also provide interpretation of what seems to be wrong with the current structure and how this study can contribute to improving the first-year transition into a university and overall college student success.

CHAPTER FIVE: DISCUSSION

The purpose of this chapter is to provide further understanding of the findings within the context of the current research and the theoretical framework regarding college student success, first-year success courses and peer mentoring. This chapter will provide a summary of the study, discussion of the findings, implications for practice, recommendations for further research and conclusions.

Summary of the Study

The purpose of this study was to understand how college students define college student success and in what ways a first-year success course with or without peer mentoring influences the success of college students.

These topics were studied through an online survey that measured how students define college student success, outcomes of a first-year success course and outcomes of peer mentoring. The online survey was developed based on the literature regarding college student success, first-year success courses and peer mentoring. Participants were asked to score items related to definitions of college student, success course outcomes, peer mentor characteristics, peer mentor outcomes and activities related to college student success. A smaller sample of the online survey respondents participated in a follow-up phone interview. The phone interview questions were designed to provide further understanding of how first-year success courses and peer mentoring influenced college student success. Responses were coded using the outcomes utilized in the online survey for first-year success courses and peer mentoring.

Participants represented nine different institutions across the United States from both public and private 4-year institutions. The study included 450 participants who were enrolled in a first-year success course; 69 (15%) of the participants did not have a peer mentor and 349 (77%) did have a peer mentor. A demographic breakdown was provided for gender, ethnicity, first generation college student, GPA and type of institution.

Additionally, a qualitative sample of 20 included students who had a peer mentor in their first-year success course. The interviewees represented 5 of the institutions in the study.

This study attempted to answer the following four research questions:

1. How do college students define college student success?
2. How and to what extent does participation in a first-year success course influence college student success?
3. How and to what extent does peer-mentoring influence college student success?
4. How and to what extent do peer-mentoring and first-year student success courses compare with each other in their influence on college student success?

All four questions were answered through quantitative and qualitative analysis. The quantitative analysis included frequencies, means, factor analyses, cross tabulations, correlations and regressions along with the information gathered from the qualitative analysis.

Discussion of the Findings

There are four major findings from this study. One, students in this study have a different definition for college student success than what is most commonly presented in the current research. Two, first-year success courses and peer mentor programs do not

help *all* students to seek resources and or university activities that they feel are important to their college student success. Three, having a positive relationship with a peer mentor has a strong relationship in developing self-awareness and personal skill development for mentees who had a peer mentor in their success course. Finally, a peer mentor in a success course helps students meet other students, meet with faculty members and have someone to talk to about academic life more than a success course alone.

Defining College Student Success

There are a variety of indicators of college student success including but not limited to: persistence from year to year, graduation, high academic GPA, and student engagement in educationally purposeful activities (Willingham, 1985; Astin, 1993; Tinto, 1987; Pascarella & Terinzini, 2005; Kuh et. al., 2006; Padilla, 2009). Braxton (2003) indicates that there are three types of goals that students want to achieve when they attend college which include enrollment, social experience and academic experience. The enrollment goal is why the student is attending the institution whether they want to obtain a degree or transfer somewhere else or just take some classes. The social experience goals include developing friendships, balancing their lives and developing leadership skills. Although Braxton frames these items in terms of goals, these goals are also outcomes that the student hopes to achieve thus contributing to their success.

The students in this study indicated that their top five definitions of college student success are: 1) obtaining a fulfilling and satisfying job after college, 2) knowing how to balance life responsibilities, 3) graduating from college, 4) find out who they truly are and 5) become well rounded. These findings show that students believe a “successful

student” is a student who is able to find out who they are while in college, become well rounded and able to balance their life responsibilities which can lead them to obtaining a job that is meaningful. The current research shows that the most common indicators of success are academic performance (Willingham, 1985; Kuh et. al, 2005) and graduating from college (Chickering & Gamson, 1985; Pascarella & Terinzini, 2005; Kuh et. al., 2005; Padilla, 2009). Students in this study are more interested in development of themselves in order to be able to balance their life responsibilities and be in a job they enjoy. This finding supports recent findings that the students’ perception of success includes balancing life responsibilities and becoming independent (Braxton, 2003; Yazedijan, 2008). Although academic achievement seems to be how most institutions measure success, the students in this study do not place academic achievement in their top five choices for how they define success. Although graduating from college, as a definition of success, is in line with previous research, the other top choices that students identified, finding out who they truly are, becoming well-rounded, and balancing life responsibilities, are not commonly discussed as a part of the literature related to college student success. This finding contributes to the research literature in a significant way because it provides a different comprehensive definition of college student success. From the findings in this study I propose the following comprehensive definition of college student success. College student success is demonstrated by the development of self-awareness and skills that will help a student know how to balance their life responsibilities and become well rounded in order to graduate from college and obtain a meaningful job.

Success Courses

This study found that success courses did not help all students engage in activities that are important for college student success. The findings in this study demonstrated that students were divided in their responses that the course helped them to engage in purposeful educational activities, such as meeting with their academic advisor, seeking tutoring services, and getting involved in research or in a club. Current research indicates that first-year success courses help students to become integrated into the campus both academically and socially, increases retention, and increases involvement in on campus activities (Hunter & Linder, 2005; Keup & Barefoot, 2005). The findings are in line with the current research to some extent because close to 50% of the participants felt like the success course did help them to engage in activities on campus, seek academic support services, etc. However, the remainder of the participants did not feel that the course helped them to engage in these ways. Therefore there is something missing in success courses that is not helping some students to engage in activities that will contribute to their success. About half of the students in this study felt that the success course did not help them during the transition.

However, in regards to academic improvement the findings in this study suggested that the success course helped students to improve their GPA. This finding is consistent with the research that students enrolled in first-year success courses either have a higher GPA or it improves their GPA (Hunter & Linder, 2005).

Peer Mentoring

There are significant findings regarding peer mentoring in this study. This study showed that students who were in a success course with a peer mentor received more personal and social support. Students felt supported by having someone they could talk to who helped them to connect with resources on campus including faculty, and helped them to become more self-confident and self-aware. This finding is in line with the research on mentoring. Kram (1985) explains that mentoring can help support psychosocial functions which include self-confidence and competence for the mentee. The participants were more likely to have a higher level of personal and social support if their peer mentor had all ten of the characteristics identified in the study which included things such as: friendly, help with academic and personal life, open, available, etc. The characteristics of a peer mentor are important in determining if the peer mentor will help in fostering student engagement in different activities on campus. The findings from this study show that if a peer mentor is knowledgeable and has the qualities described in this study, then they are more likely to provide the personal and social support that helps students to engage in activities to improve their self confidence and motivation. This finding is in line with what Terrion and Leonard (2005) found regarding peer mentor characteristics. Terrion and Leonard's (2005) results showed that peer mentors with certain characteristics support the psychosocial and career functions of peer mentoring.

In addition, participants who were in success courses with a peer mentor engaged in the specific areas of meeting with faculty, talking with their peer mentor and meeting other students more than students who were in a success course without a peer mentor.

Therefore, the peer mentor helped students with their social integration into the university by connecting them with their faculty members and other students and provided them with an opportunity to have someone to talk to about their academic life.

Theoretical Framework

The theoretical frameworks that were utilized for this study were Tinto's Interactionist Theory and Astin's Student Involvement Theory. Tinto (1987) suggests that social and academic integration are ways that a student can adjust to college life. As described in the literature review the components of social integration includes student's interaction with faculty (Tinto, 1987; Kuh et. al., 2005), relationships with peers (Willingham, 1985; Astin, 1993; Kuh et. al., 2005) and experiences outside of the classroom such as clubs and organizations (Anderson, 1985; Tinto, 1987; Kuh et. al., 2005). Academic integration has to do with a student's GPA and their intellectual development (Tinto, 1987). Academic integration can include students' engagement in academically related experiences inside and outside of the classroom (Tinto, 1987; Astin, 1993; Kuh et., al. 2005).

Astin's Student Involvement Theory in its basic form suggests that the more the student is involved the more they will persist and be successful in college. Student involvement is further described as how much time and energy the student invests in the educational process. This can also be described as student engagement (Chickering & Gamson, 1987). Interaction with peers and faculty seemed to provide the most impact on student learning and development.

The current study was designed to understand if the first-year course achieved certain outcomes. Half of the participants in this study indicated that the outcomes of the success course were related to social and academic integration into the university and involvement in educational purposeful activities. Students believed that seeking advising and tutoring services are important for their success in college and use of these services can foster academic integration. In addition, students believed that getting involved in a club or research opportunity are important for their success. These opportunities are involvement in educationally purposeful activities and can also contribute to social integration. Students believed that these activities, which are related to these two theories, are important for their college student success and yet only about half felt that the success course helped them in these ways. Students believed that student involvement and social and academic integration can contribute to college student success and this study finds that success courses do provide these opportunities but not for all of the participants in this study.

The peer mentoring component supported these two theories as well. Peer mentors helped students mostly with the social integration and involvement in the university. Students were more likely to meet with their faculty members and meet other students if they had a peer mentor in their class. Peer mentors also helped students with their self-development and self-awareness. The peer mentoring component had a stronger effect on helping students to engage in the campus community through a variety of activities which in turn helped them to become more involved and socially and academically integrated into the university. Therefore, this study found that first-year

success courses and peer mentoring can foster student engagement and involvement in academic and social activities on campus.

Implications for Future Research

There are three main implications for further research which include testing the comprehensive definition of college student success proposed earlier in the discussion, further research on first-year success courses in regards to how effective the different types of success courses are and finally identifying what aspects of a peer mentor relationship supports student engagement.

Further research should include testing the new comprehensive definition of college student success that was developed from the findings in this study. In future research this definition of college student success should be tested and see if it can be applied to other areas of student life. In addition, further research needs to be conducted to identify specific institutional factors and university activities that contribute to college student success.

First-year success courses are offered in a variety of formats including focus on the first-year transition, specific topics, discipline-linked or as an extension of orientation (Hunter & Linder, 2005). Further studies comparing the different types of first-year success courses and their impact on college student success and persistence into the second year would help to identify the best method of instruction for a first-year success course. Conducting a documentation analysis which includes the review of the syllabi for each type of class, looking at the type of assignments that students are asked to complete and the outside activities related to the class will help to understand how the curriculum

of the course effects student outcomes. The current study included a variety of course types with different number of units and topics for the courses. There is cause to believe that the type of course could be the reason why there were different findings for the first-year success course where some students found it helpful and some did not. Further exploration of why there is a difference in students' views on the helpfulness of first year success courses. From the qualitative interviews in this study we found that the curriculum of the course did seem to make a difference. In addition, the number of credits, type of instruction and instructor of the course should be studied further to see if they have any difference on the impact on student outcomes. It will be helpful also to compare the outcomes for students by course rather than by institution because each class within an institution can be taught differently and have a different syllabus. Future research in the first-year success courses comparing the different areas mentioned above will provide a better understanding about how the curriculum in a first-year success course makes a difference.

Peer mentors positively affect student outcomes and engagement. Further qualitative studies identifying how peer mentors facilitate the involvement of their students in educational purposeful activities will help to understand what type of role the peer mentor needs to have inside and outside of the classroom. How do peer mentors provide information to their students? Are students more inclined to engage in the campus community when their peer mentor shares their experiences or just provides students with information? What is it about the relationship that helps foster the success of students?

Further research on peer mentoring in a success course should include comparing the responsibilities of peer mentors. In this study we found that peer mentors were involved in the first-year success course in two possible ways. In some first-year success courses peer mentors were only present in the classroom while in other courses they were present in the classroom and also met individually with their mentees outside of class on a regular basis. Studying the difference in the mentoring relationship based on the interaction of the mentor is necessary to understand what aspects of mentoring relationships foster student engagement and success.

Implications for Future Practice

College Student Success

As institutions develop new programs to help increase student retention and persistence at their institution, they should take into consideration what students believe will contribute to their success. Understanding college student success from the students' perspective will not only help institutions achieve their goals of retaining and graduating students but also meet the needs of their students. Institution missions should incorporate outcomes that the students hope to achieve by pursuing a college education. These indicators of college student success should then be incorporated into any programming designed to improved student persistence.

First Year Success Courses and Peer Mentoring

The study demonstrated that both the success course and peer mentoring fell short for some students in helping them engage in university activities that the participants' felt were important to their college student success. When developing first-

year success courses faculty and professional staff need to consider what the student success outcomes are for the class and what activities they need to engage in to be successful while in college. Therefore, the curriculum and assignments of the course need to be carefully considered in order to achieve the outcomes that will contribute to college student success. Based on the findings in this study first-year success courses must include specific elements to help contribute to college student success. First, the course design should have specific course outcomes and objectives related to the students needs and expectations of what will help them be successful. These outcomes include 1) gaining knowledge about campus resources and in what ways they benefit students 2) awareness of campus activities that will encourage student involvement 3) knowledge of how to meet with faculty and foster a positive relationship and 4) development of personal and academic skills in order to be academically successful.

The curriculum of the course should include the following 1) purpose of the course and how it is going to help students in their first year, 2) student development theories, 3) information about campus resources, 4) information about the importance of engaging in campus experiences both academic and social and 5) assignments that are relevant and useful for student's development during their first year. It will be important to share with students in the course the purpose of the course and how the course assignments have been developed to help them in their first-year experience. Students in this study who did not find the course helpful indicated that the course had assignments that were considered busy work and not relevant for their experience while others who did find the course useful described assignments and activities that were useful to their

first year experience. Therefore, explaining to the students what the learning outcomes are and how the instructors plan to achieve these outcomes will provide students with the understanding of how the course design and assignments are appropriate and relevant for their first-year experience. Second, learning about student development theories will help students to learn about themselves and develop a stronger sense of self awareness and their current stage in their development in relation to their college experience. Third, learning about campus resources is essential for students in their first year. Information regarding financial aid, money management and how to find a job should especially be included in the course curriculum. Students in the study indicated that having access to financial aid was very important to their college student success yet they did not feel like the success course helped them with financial issues. Therefore, the course should include this information into the curriculum. Many students are overwhelmed by the experience itself and don't realize that there are support services to help them in a variety of ways. Encouraging students to use the resources and showing students where they can find the resources should be a part of the course and would be appropriate to include as part of in-class activities. Fourth, students should be aware of opportunities such as internship, research and/or leadership opportunities that will help them develop skills that can contribute to their success in college and prepare them for their future career. Finally, assignments should be developed that are relevant to developing the student and helping them to engage in self-exploration. Faculty-student interaction is an important university activity that contributes to college student success. A course assignment in the success course should include an interview with a faculty member on campus.

Encouraging students to engage with faculty as part of a course assignment and provide them with questions to ask during the interview will help students to feel more comfortable in meeting with faculty. This would encourage students to take initiative and visit their professors during their office hours in the future. Knowledge of campus resources and how they can help student is also important for college student success. Therefore, the course should incorporate in class activities that would allow for students to explore campus resources and what services the resources provide, these include resources such as academic support services, student involvement centers, career centers, campus health, and financial aid. Any class assignments created should be relevant to what the student is learning in their other classes as well. Assignments for outside of the class should be well thought out. In class activities should encourage in class discussion so that students are able to interact with fellow students and share their experiences and their concerns during their first year.

Success courses should also have peer mentoring components as the peer mentor component had a strong impact on students' personal and social support and social integration into the university. Peer mentors should be present in the classroom but also meet with students outside of the classroom so that they can develop relationships with their students and help provide the support and information students need in order to be successful in college.

In regards to peer mentoring it will be important to identify students who are the best fit for peer mentoring positions. An application and interview process is essential to identify those candidates that have the characteristics that are important to foster positive

relationships with their mentees and to help support them in their personal development and engagement on campus. In addition, training is important to make sure that the peer mentors are knowledgeable and that they understand their role and how to help students become engaged on campus. Peer mentors should know what it means to be a successful peer mentor and how important their interactions are with their mentees.

Conclusion

First-year success courses and peer mentoring have the potential to support undergraduate students in having a successful transition into the university and increase their retention and success at the university. This study demonstrated that first-year success courses and peer mentoring can contribute to the success of college students. However, not all institutions offer the same type of courses and therefore future studies need to compare the different types of first-year success courses and if they have a different levels of influence on college student success. The peer mentoring component showed stronger relationship in terms of helping students to be successful. It will be important to find and train peer mentors so that they can fulfill their role and help students engage in the campus community and become successful is essential. This study helped to support the research related to college student success, first-year success courses and peer mentoring. However, it also highlighted some areas that first-year success course and peer mentoring are lacking. Peer mentoring and first-year success courses have not been studied together in the literature to determine the combination of its effects on students. The hope for this study is that it will help to advance the research

on first-year success courses and peer mentoring and find the combination that works the most efficiently in helping students have a successful first-year and college career.

APPENDIX A
SUBJECT DISCLOSURE FORM
IDENTIFYING COLLEGE STUDENT SUCCESS

You are being invited to participate in the above-titled research study. The purpose of this survey is to evaluate the effectiveness of peer-mentor programs and first-year success courses in assisting students with the transition to a university and contributing to college student success. You are eligible to participate because you were involved in a success course during your first year of college in fall 2008 and are greater than 18 years of age.

Your participation in this research study is completely voluntary. Your participation includes completing an online survey to evaluate how your enrollment in a success course with or without a peer mentoring component may have contributed to your success in college. You may also be chosen to participate in a follow-up phone interview as part of the study. Only those involved in the analysis of the study will have access to your information and all information is confidential. Once all data is collected, any identifying information will be erased from the data. Your institution/University will have access to the data specific to your institution/University, but only after the identifying information has been removed.

Any questions you have will be answered and you may withdraw from the study at any time without effecting your student status. Participating in this study will not benefit you directly, but it will allow us to understand how first-year success courses and peer mentoring may contribute to college student success. You may feel some anxiety resulting from thinking about your transition into the university. Should you feel any anxiety and would like to speak with someone please contact someone at the student health center at your university.

The cost to you is your time, approximately 15-20 minutes to complete the online survey and if you are selected to participate in a follow-up phone interview an additional hour. You will not be paid to participate in this study. However, **you can choose to submit your name to participate in a drawing for \$50 gift card to any of the following: Target, Best Buy or WalMart.** There will be one winner for this drawing and your chance of winning depends on the number of participants who choose to enter the drawing. *If you were not enrolled in a first-year success course in fall 2008 you are not eligible to enter the drawing. In addition, you must complete the survey in order to enter the drawing.* If you participate in a follow-up interview, you can be entered in a second drawing for \$50 gift card to Target, Best Buy or Walmart.

Please feel free to speak with Arezu Corella, Principal Investigator, at (520) 626-3500 if any questions or concerns arise. If you have questions about your rights as a research subject you may call the University of Arizona Human Subjects Protection Program office at (520) 626-6721. If you have questions, complaints, or concerns about the research and cannot reach the Principal Investigator; or want to talk to someone other than the Investigator, you may call the University of Arizona Human Subjects Protection Program office. (If out of state use the toll-free number 1-866-278-1455.) If you would like to contact the Human Subjects Protection Program via the web (this can be anonymous), please visit <http://www.irb.arizona.edu/contact/>.

APPENDIX B

RECRUITMENT EMAIL

Dear Student,

My name is Arezu Corella, I am a PhD student at The University of Arizona in Tucson, Arizona. I am currently working on my dissertation in the department of Higher Education. You are receiving this email because you were enrolled and completed a first-year success course during fall 2008. My dissertation topic is looking at the experiences of students who participated in a first-year success course and/or a peer-mentoring program. I would greatly appreciate if you could take 15-20 minutes to complete the following survey online at the following URL:

https://www.surveymonkey.com/s.aspx?sm=VEKvLYCDiZgZMh8RTd1J8A_3d_3d.

The survey is completely voluntary and your responses will remain confidential. You will have the option at the end of the survey to enter into a drawing for a gift card to Target, Walmart or Best Buy. You will be eligible to participate in the drawing for a gift card if you respond to the survey the Friday of the next full week from which you received this email. If you have any questions regarding the study please let me know. You can email me at arezu@email.arizona.edu or call 520-991-8805. I appreciate your time. Thank you.

Arezu K. Corella

PhD Candidate, University of Arizona

APPENDIX C ONLINE SURVEY

Appendix D.1: Online Survey Questions

Prior to online survey participants will read informed consent form and if they push the next button to move onto the survey they are accepting to participate

Section One: Student Success

1. How do you define college student success? (Pick your top five and rank in order)

Graduating from college
 Receiving honors and awards
 Earning a high GPA
 Getting involved in clubs and organizations
 Obtaining a leadership position
 Obtaining a fulfilling and satisfying job after college
 Obtaining a high-paying job after college
 Being accepted to graduate school
 Making lifetime friends
 Working with a faculty member in a research lab
 Obtaining an internship while in college
 Becoming well-rounded
 Developing skills such as communication skills
 Knowing how to balance life responsibilities
 Being connected on campus and off campus
 Finding out who you truly are
 Learning how to be a team player

Section Two: First-year success course

The next section asks questions about your first-year success course. Please think about your first-year success course and answer the following questions:

1. Which of the following courses were you enrolled in during fall 2008?
 Will have drop down menu of courses from the various institutions with the name of the university/institution.
2. Was this course (which we will refer to as a success course) a requirement in your program?

Yes/No

3. How many credits was the success course?
 - a. 1 credit
 - b. 2 credits
 - c. 3 credits
 - d. 4 credits

4. To what extent do you disagree or agree with the following statements regarding your first-year success course or first-year seminar? (changed the order from agree to disagree to disagree to agree in table below)

Participating in a first-year success course or first-year seminar:

5. Helped me to stay at the university	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
6. Improved my self-confidence	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
7. Improved my motivation to succeed	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
8. Helped me set future goals	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
9. Helped me to adjust to the university	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
10. Provided me info about my career decisions	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
11. Helped me with my major choice	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
12. Helped me to seek tutoring services	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
13. Helped me to seek advising services	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
14. Helped me to meet with my faculty members	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
15. Helped me to learn about campus resources	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
16. Allowed me to have someone to talk to about academic life	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
17. Allowed me to have someone to talk to	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree

about social life				
18. Helped me to get involved on campus	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
19. Helped me learn about internship and research opportunities	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
20. Improved my GPA	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
21. Helped me develop academic skills	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
22. Helped me to meet other students	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
23. Helped me learn about academic dates and deadlines	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
24. Helped with financial issues	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
25. Contributed to my success as a college student	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree

Section Three: Peer Mentoring (Peer Mentoring can also be referred to as peer leader, preceptor, peer instructor, peer advisor, peer assistant, peer coach etc.)

26. Did you have a peer mentor as part of your success course?

Yes/No (If yes survey will take them to the peer mentor section, if no it will take them to the section after that.)

Think about the interactions you might have had with a peer mentor in answering the questions in the next section.

27. Did you meet with your peer mentor outside of class?

28. If yes, how many times did you meet with your peer mentor outside of class throughout the course?

(will have a drop down menu with one time, two times, three times, four times, more than four times.)

29. When you met with your mentor outside of class how long did the meetings usually last?

(will have a drop down menu 1-30 mins, 31-59, more than 60 mins)

30. What characteristics do you believe a peer mentor should have in order to be effective? Choose three and rank in order.

- a. Honest
- b. Good listener
- c. Help with your academic and personal life
- d. Open-minded
- e. Genuine
- f. Available
- g. Knowledgeable
- h. Friendly
- i. Resourceful
- j. Reliable

31. To what extent do you agree with that your peer mentor had each of the characteristics listed below? Please evaluate each characteristic on the following scale. (If you had more than one peer mentor please answer regarding the peer mentor that you met with most frequently)

Honest	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Good listener	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Help with your academic and personal life	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Open-minded	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Genuine	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Available	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree

Knowledgeable	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Friendly	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Resourceful	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Reliable	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree

32. To what extent do you disagree or agree with the following statements:

Having a peer mentor:

33. Helped me to stay at the university	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
34. Improved my self-confidence	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
35. Improved my motivation to succeed	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
36. Helped me set future goals	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
37. Helped me to adjust to the university	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
38. Provided me info about my career decisions	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
39. Helped me with my major choice	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
40. Helped me to seek tutoring services	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
41. Helped me to seek advising services	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
42. Helped me to meet with my faculty members	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
43. Helped me to learn about campus resources	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
44. Allowed me to have someone to talk to	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree

about academic life				
45. Allowed me to have someone to talk to about social life	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
46. Helped me to get involved on campus	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
47. Helped me learn about internship and research opportunities	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
48. Improved my GPA	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
49. Helped me develop academic skills	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
50. Helped me to meet other students	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
51. Helped me learn about academic dates and deadlines	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
52. Helped with financial issues	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
53. Contributed to my success as a college student	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree

54. In your opinion, indicate to what extent you disagree or agree with how important are each of these activities are for your college student success?

Having access to Financial Aid	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Having a good peer mentor	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Participating in a success course	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Meeting with your academic advisor	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Being involved in a club	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Using tutoring	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree

resources		Disagree		
Having a job off campus	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Having a job on campus	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Getting involved in a club or organization	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Getting involved in research	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree

55. To what extent do you agree with the following statements?

Peer Mentor Programs are effective for college student success	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
First-Year Success Courses are effective for college student success	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree

56. Please explain in one or two sentences why you chose your response in regards to Peer Mentoring and student success.

57. Please explain in one or two sentences why you chose your response in regards to First-Year Success Courses.

58. Is there anything else you would like to share about first-year student success courses or peer mentoring?

Section Four: Demographics

Please provide the following information regarding yourself:

59. Gender: Male Female Transgender Other:

60. Major: _____

61. Ethnicity (Optional):

_____ African American

_____ Asian American/Pacific Islander

- _____Caucasian
_____Hispanic
_____Native American/Alaskan Native
_____Multi-racial/bi-racial
_____Other, please specify _____

62. Are you a first generation college student? Yes No
63. Occupational Aspirations: What type of job do you expect to get when you graduate?
64. What is your date of birth? Month, day, year
65. What is the initial of your first name and your last name? (this information will be used to match your responses to your follow-up phone interview responses if you are selected to participate and are willing to participate in a follow-up phone interview)
66. Father's Highest Level of Education Completed: Less than High School, High School, Some College, Associates/2 year college, Bachelors, Post Bachelor Training, Masters, PhD, Professional degree (e.g. J.D., M.D., MBA., etc.)
67. Mother's Highest Level of Education Completed: Less than High School, High School, Some College, Associates/2 year college, Bachelors, Post Bachelor Training, Masters, PhD, Professional degree (e.g. J.D., M.D., MBA., etc.)
68. What was your cumulative GPA in high school?
- 3.5 – 4.0 GPA
 - 3.0 – 3.49 GPA
 - 2.5 – 2.99 GPA
 - 2.0 – 2.49 GPA
 - Below a 2.0 GPA
69. What is your cumulative GPA in college?
- 3.5 – 4.0 GPA
 - 3.0 – 3.49 GPA
 - 2.5 – 2.99 GPA
 - 2.0 – 2.49 GPA

- Below a 2.0 GPA

70. There may be some follow-up questions to help us better understand peer mentoring and success courses. May we contact you to see if you would be interested in participating in a follow-up phone interview? If you participate in a follow-up phone interview you can choose to be entered into a drawing for a \$50 gift card to Target, Walmart, or Best Buy.

Yes/No

If you are willing to complete a follow-up phone interview please provide your first and last name and email address. Thank you.

If you would like to enter into the drawing for a \$50 gift card to Target, Walmart, or Best Buy please provide me with your first name and an email address. Thank you.

APPENDIX D
FOLLOW-UP PHONE INTERVIEW QUESTIONS

Interview Questions:

1. How did you feel about your transition from high school to college? Please describe your transition what went well and what was challenging?
2. What were your expectations of your peer mentor, what did you think the peer mentor would help you with? Did your experience with your peer mentor match your expectation? Why or Why not?
3. How did your mentor influence your transition to college? Please provide examples.
4. How did the class itself help you with your transition to college? Please provide examples. What did you learn from the class that was related to your transition to college?
5. Describe your relationship with your mentor. How did this relationship influence your first-semester/year in college? Please provide examples.
6. How did you feel about having a mentor during your first semester/first year in college?
7. Did having a mentor help you in your second semester/second year in college? Please provide examples
8. Did having a mentor influence experiences that you engaged in or decisions that you made? Please provide examples
9. What aspect of the program was most helpful? Why?
10. What aspect of the program was least helpful? Why?
11. Did the class help you in learning more about campus resources? How? Was this information useful? Did you utilize any of the resources? If so, how did they help you?
12. Did your mentor help you in learning more about campus resources? How? Was this information useful? Did you utilize any of the resources? If so, how did they help you?
13. Did your mentor refer you to other staff, faculty or students on campus? If so, did you meet with any of the staff, faculty or students he/she referred you to?
14. Did these connections help you with career choices, or research and internship opportunities?
15. Did the class help you in deciding on a new major or confirm that you were in the right major? Why or why not?
16. Did you become a peer mentor yourself or do you think you would like to become a peer mentor? If so, why did you decide to or want to become a peer mentor.
17. How different do you think your first-year experience would have been if you didn't have a peer mentor?
18. How different do you think your first-year experience would have been if you didn't take the success course?

19. Is there anything that you would like to share about the class or your experience with your mentor that we haven't covered?

APPENDIX E: TABLES

Table E.1 Demographic Data of Participants of Online Participants (MWPU1)
(N=47)

Characteristic	N	%	Characteristic	N	%
<i>Gender</i>			<i>Ethnicity</i>		
Male	15	31.9%	Caucasian	36	76.6%
Female	37	57.4%	Non-Caucasian	4	8.5%
Missing	5	10.6%	Missing	7	14.9%
<i>High School GPA</i>			<i>College GPA</i>		
below a 2.0	0	0.0%	below a 2.0	1	2.1%
2.00-2.99	15	32.0%	2.00-2.99	4	8.5%
3.00-4.00	26	55.3%	3.00-4.00	35	74.5%
Missing	6	12.8%	Missing	7	14.9%
<i>Peer Mentor</i>			<i>Met with Peer Mentor Outside of class</i>		
yes	40	85.1%	yes	19	40.4%
no	4	8.5%	no	21	44.7%
Missing	3	6.4%	Missing	7	14.9%
<i>Success Required</i>			<i>Success Course Credit Hours</i>		
yes	28	59.6%	1-2 credits	2	4.2%
no	16	34.0%	3-4 credits	42	89.4%
missing	3	6.4%	missing	3	6.4%
<i>First-Generation</i>					
yes	12	25.5%			
no	30	63.8%			
Missing	5	10.6%			

Table E.2 Demographic Data of Participants of Online Participants (WPR)
(N=192)

Characteristic	N	%	Characteristic	N	%
<i>Gender</i>			<i>Ethnicity</i>		
Male	16	8.3%	Caucasian	160	83.3%
Female	165	85.9%	Non-Caucasian	18	9.4%
Missing	11	5.7%	Missing	14	7.3%
<i>High School GPA</i>			<i>College GPA</i>		
below a 2.0	0	0.0%	below a 2.0	1	50.0%
2.00-2.99	0	0.0%	2.00-2.99	17	8.9%
3.00-4.00	178	92.7%	3.00-4.00	160	89.9%
Missing	14	7.3%	Missing	14	7.3%
<i>Peer Mentor</i>			<i>Met with Peer Mentor Outside of class</i>		
yes	173	90.2%	yes	173	90.1%
no	7	3.6%	no	0	0.0%
Missing	12	6.2%	Missing	12	6.2%
<i>Success Required</i>			<i>Success Course Credit Hours</i>		
yes	105	54.7%	1-2 credits	176	91.7%
no	74	38.5%	3-4 credits	2	1.0%
Missing	13	6.8%	Missing	14	7.3%
<i>First-Generation</i>					
yes	15	7.8%			
no	166	86.5%			
Missing	11	5.7%			

Table E.3 Demographic Data of Participants of Online Survey
Participants (NEPR)
(N=10)

Characteristic	N	%	Characteristic	N	%
<i>Gender</i>			<i>Ethnicity</i>		
Male	3	30.0%	Caucasian	8	80.0%
Female	5	50.0%	Non-Caucasian	0	0.0%
Missing	2	20.0%	Missing	2	20.0%
<i>High School GPA</i>			<i>College GPA</i>		
below a 2.0	0	0.0%	below a 2.0	0	0.0%
2.00-2.99	2	20.0%	2.00-2.99	0	0.0%
3.00-4.00	4	40.0%	3.00-4.00	8	80.0%
Missing	2	20.0%	Missing	2	20.0%
<i>Peer Mentor</i>			<i>Met with Peer Mentor Outside of class</i>		
yes	4	40.0%	yes	0	0.0%
no	5	50.0%	no	4	40.0%
Missing	1	10.0%	Missing	6	60.0%
<i>Success Required</i>			<i>Success Course Credit Hours</i>		
yes	4	40.0%	1-2 credits	4	40.0%
no	5	50.0%	3-4 credits	5	50.0%
Missing	1	10.0%	Missing	1	10.0%
<i>First-Generation</i>					
yes	0	0.0%			
no	8	80.0%			
Missing	2	20.0%			

Table E.4 Demographic Data of Participants of Online Participants
(SPR)
(N=16)

Characteristic	N	%	Characteristic	N	%
<i>Gender</i>			<i>Ethnicity</i>		
Male	1	6.2%	Caucasian	13	81.2%
Female	13	81.2%	Non-Caucasian	1	6.2%
Missing	2	12.5%	Missing	2	12.5%
<i>High School GPA</i>			<i>College GPA</i>		
below a 2.0	0	0.0%	below a 2.0	0	0.0%
2.00-2.99	3	18.8%	2.00-2.99	2	12.5%
3.00-4.00	11	68.8%	3.00-4.00	12	75.0%
Missing	2	12.5%	Missing	2	12.5%
<i>Peer Mentor</i>			<i>Met with Peer Mentor Outside of class</i>		
yes	16	100.0%	yes	5	31.2%
no	0	0.0%	no	11	68.8%
Missing	0	0.0%	Missing	0	0.0%
<i>Success Required</i>			<i>Success Course Credit Hours</i>		
yes	16	100.0%	1-2 credits	2	12.5%
no	0	0.0%	3-4 credits	14	87.4%
Missing	0	0.0%	Missing	0	0.0%
<i>First-Generation</i>					
yes	1	6.2%			
no	13	81.2%			
Missing	2	12.5%			

Table E.5 Demographic Data of Participants of Online Participants (SPU2)
(N=10)

Characteristic	N	%	Characteristic	N	%
<i>Gender</i>			<i>Ethnicity</i>		
Male	2	20.0%	Caucasian	8	80.0%
Female	8	80.0%	Non-Caucasian	2	20.0%
Missing	0	0.0%	Missing		0.0%
<i>High School GPA</i>			<i>College GPA</i>		
below a 2.0	0	0.0%	below a 2.0	0	0.0%
2.00-2.99	7	70.0%	2.00-2.99	6	60.0%
3.00-4.00	3	30.0%	3.00-4.00	4	40.0%
Missing	0	0.0%	Missing		
<i>Peer Mentor</i>			<i>Met with Peer Mentor Outside of class</i>		
yes	0	0.0%	yes	N/A	N/A
no	10	100.0%	no	N/A	N/A
Missing	0	0.0%	Missing		
<i>Success Required</i>			<i>Success Course Credit Hours</i>		
yes	2	20.0%	1-2 credits	6	60.0%
no	8	80.0%	3-4 credits	4	40.0%
missing	0	0.0%	missing	0	0.0%
<i>First-Generation</i>					
yes	5	50.0%			
no	5	50.0%			
Missing	0	0.0%			

Table E.6 Demographic Data of Participants of Online Participants (SWPU)
(N=14)

Characteristic	N	%	Characteristic	N	%
<i>Gender</i>			<i>Ethnicity</i>		
Male	1	7.1%	Caucasian	9	64.3%
Female	13	92.9%	Non-Caucasian	2	14.3%
Missing	0	0.0%	Missing	3	21.4%
<i>High School GPA</i>			<i>College GPA</i>		
below a 2.0	0	0.0%	below a 2.0	0	0.0%
2.00-2.99	1	7.1%	2.00-2.99	3	21.4%
3.00-4.00	10	71.4%	3.00-4.00	8	57.1%
Missing	3	21.4%	Missing	3	21.4%
<i>Peer Mentor</i>			<i>Met with Peer Mentor Outside of class</i>		
yes	11	78.6%	yes	10	71.4%
no	3	21.4%	no	1	7.1%
Missing	0	0.0%	Missing	3	21.4%
<i>Success Required</i>			<i>Success Course Credit Hours</i>		
yes	9	64.3%	1-2 credits	13	92.9%
no	5	64.3%	3-4 credits	1	7.1%
Missing	0	0.0%	Missing	0	0.0%
<i>First-Generation</i>					
yes	3	21.4%			
no	10	71.4%			
Missing	1	7.1%			

Table E.7 Demographic Data of Participants of Online Participants (MWPU2)
(N=85)

Characteristic	N	%	Characteristic	N	%
<i>Gender</i>			<i>Ethnicity</i>		
Male	17	20.0%	Caucasian	59	69.4%
Female	58	68.2%	Non-Caucasian	13	15.3%
Missing	10	11.8%	Missing	13	15.3%
<i>High School GPA</i>			<i>College GPA</i>		
below a 2.0	0	0.0%	below a 2.0	3	3.5%
2.00-2.99	14	16.5%	2.00-2.99	15	17.6%
3.00-4.00	59	69.5%	3.00-4.00	56	65.8%
Missing	12	14.1%	Missing	11	12.9%
<i>Peer Mentor</i>			<i>Met with Peer Mentor Outside of class</i>		
yes	55	64.7%	yes	21	24.7%
no	29	34.1%	no	34	40.0%
Missing	1	1.2%	Missing	30	35.3%
<i>Success Required</i>			<i>Success Course Credit Hours</i>		
yes	27	31.8%	1-2 credits	54	63.5%
no	57	67.1%	3-4 credits	29	34.1%
Missing	1	1.2%	Missing	2	2.4%
<i>First-Generation</i>					
yes	29	34.1%			
no	45	52.9%			
Missing	11	12.9%			

Table E.8 Demographic Data of Participants of Online Participants (SPU3)
(N=12)

Characteristic	N	%	Characteristic	N	%
<i>Gender</i>			<i>Ethnicity</i>		
Male	2	16.7%	Caucasian	8	66.7%
Female	9	75.0%	Non-Caucasian	3	25.0%
Missing	1	8.3%	Missing	1	8.3%
<i>High School GPA</i>			<i>College GPA</i>		
below a 2.0	0	0.0%	below a 2.0	1	8.3%
2.00-2.99	1	8.3%	2.00-2.99	3	25.0%
3.00-4.00	10	83.4%	3.00-4.00	7	58.3%
Missing	1	8.3%	Missing	1	8.3%
<i>Peer Mentor</i>			<i>Met with Peer Mentor Outside of class</i>		
yes	11	91.7%	yes	5	41.7%
no	1	8.3%	no	6	50.0%
Missing	0	0.0%	Missing	1	8.3%
<i>Success Required</i>			<i>Success Course Credit Hours</i>		
yes	5	41.7%	1-2 credits	0	0.0%
no	7	58.3%	3-4 credits	12	100.0%
Missing	0	0.0%	Missing	0	0.0%
<i>First-Generation</i>					
yes	4	33.3%			
no	7	58.3%			
Missing	1	8.3%			

Table E.9 Demographic Data of Participants of Online Participants (SPU4)
(N=49)

Characteristic	N	%	Characteristic	N	%
<i>Gender</i>			<i>Ethnicity</i>		
Male	20	40.8%	Caucasian	38	77.6%
Female	24	49.0%	Non-Caucasian	6	12.2%
Missing	5	10.2%	Missing	5	10.2%
<i>High School GPA</i>			<i>College GPA</i>		
below a 2.0	0	0.0%	below a 2.0	0	0.0%
2.00-2.99	2	4.1%	2.00-2.99	6	12.2%
3.00-4.00	42	85.7%	3.00-4.00	38	77.5%
Missing	5	10.2%	Missing	5	10.2%
<i>Peer Mentor</i>			<i>Met with Peer Mentor Outside of class</i>		
yes	39	79.6%	yes	5	10.2%
no	10	20.4%	no	34	69.4%
Missing	0	0.0%	Missing	10	20.4%
<i>Success Required</i>			<i>Success Course Credit Hours</i>		
yes	48	98.0%	1-2 credits	1	2.0%
no	1	2.0%	3-4 credits	48	98.0%
Missing	0	0.0%	Missing	0	0.0%
<i>First-Generation</i>					
yes	8	16.3%			
no	36	73.5%			
Missing System	5	10.2%			

Table E.10
Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Agreement
with Success Course Statements

Possible outcomes related to success course	Academic and Personal Development	Social and Academic Integration	Major and Career Support
Contributed to my success as a college student	0.736		
Helped me develop academic skills	0.730		
Improved my self-confidence	0.669		
Improved my GPA	0.734		
Improved my motivation to succeed	0.661		
Helped me set future goals	0.588		
Helped me to stay at the university/college	0.577		0.403
Helped me to adjust to the university	0.564	0.473	
Helped me learn about academic dates and deadlines	0.539	0.405	
Helped me to get involved on campus	0.502	0.432	
Helped me to seek advising services		0.735	
Helped me to seek tutoring services		0.700	
Helped me to meet with my faculty members		0.663	
Allowed me to have someone to talk to about academic life	0.468	0.621	
Helped me to learn about campus resources		0.541	
Allowed me to have someone to talk to about social life	0.497	0.588	
Helped me to meet other students	0.407	0.420	
Helped me with my major choice			0.860
Provided me info about my career decisions			0.865
Helped me learn about internship and research opportunities			0.545
Helped with financial issues			--

Note: Factor loadings in boldface belong to that factor.

Table E.11
 Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Agreement
 with Peer Mentoring

	Psychosocial Support	Academic - Career Support
Peer mentoring possible outcomes		
Allowed me to have someone to talk to about academic life	0.835	
Improved my motivation to succeed	0.834	
Contributed to my success as a college student	0.780	0.414
Helped me to adjust to the university	0.799	
Helped me set future goals	0.799	
Improved my self-confidence	0.767	
Allowed me to have someone to talk to about social life	0.788	
Helped me to learn about campus resources	0.721	
Helped me develop academic skills	0.649	0.462
Helped me to meet other students	0.693	0.437
Helped me to meet with my faculty members	0.612	0.516
Helped me to get involved on campus	0.574	0.543
Helped me to stay at the university	0.564	0.545
Helped me learn about academic dates and deadlines	0.559	0.532
Helped me learn about internship and research opportunities		0.692
Helped with financial issues		0.651
Provided me info about my career decisions		0.771
Helped me with my major choice		0.729
Helped me to seek tutoring services	0.412	0.676
Helped me to seek advising services	0.471	0.640
Improved my GPA	0.433	0.598

Note: Factor loadings in bold face above are above .50

Outcome from Success Course	Levene's Test Equality Variance		t-test for equality of means				
		f	Sig.	t	df	2-t	MD
Helped me to stay at the university/college	EVA	0.22	0.63	0.83	415	0.41	0.10
	EVNA			0.86	100	0.39	0.10
Improved my selfconfidence	EVA	2.03	0.15	0.77	414	0.44	0.09
	EVNA			0.82	104	0.41	0.09
Improved my motivation to succeed	EVA	0.58	0.44	0.55	415	0.58	0.07
	EVNA			0.56	98	0.58	0.07
Helped me set future goals	EVA	0.05	0.82	0.64	414	0.52	0.08
	EVNA			0.62	93	0.53	0.08
Helped me to adjust to the university	EVA	1.88	0.17	0.75	415	0.46	0.10
	EVNA			0.77	100	0.44	0.10
Provided me info about my career decisions	EVA	3.04	0.08	0.61	415	0.54	0.08
	EVNA			0.66	105	0.51	0.08
Helped me with my major choice	EVA	2.12	0.14	-0.93	414	0.35	-0.12
	EVNA			-0.97	101	0.34	-0.12
Helped me to seek tutoring services	EVA	0.37	0.54	-0.94	415	0.35	-0.12
	EVNA			-0.95	97	0.35	-0.12
Helped me to seek advising services	EVA	0.92	0.33	1.18	414	0.24	0.16
	EVNA			1.12	91	0.26	0.16
Helped me to meet with my faculty members	EVA	4.16	0.04*	-2.23	415	0.03	-0.28
	EVNA			-2.47	108	0.02	-0.28
Helped me to learn about campus resources	EVA	0.33	0.56	1.22	415	0.22	0.14
	EVNA			1.23	98	0.22	0.14

Allowed me to have someone to talk to about academic life	EVA	0.42	0.51	-1.79	415	0.07	-0.23
	EVNA			-1.79	97	0.08	-0.23
Allowed me to have someone to talk to about social life	EVA	4.71	0.03*	-2.52	415	0.01	-0.33
	EVNA			-2.67	103	0.01	-0.33
Helped me to get involved on campus	EVA	0.28	0.59	0.62	414	0.54	0.08
	EVNA			0.63	99	0.53	0.08
Helped me learn about internship and research opportunities	EVA	0.59	0.44	1.54	414	0.13	0.18
	EVNA			1.55	98	0.12	0.18
Improved my GPA	EVA	7.54	0.01*	1.86	412	0.06	0.25
	EVNA			2.00	103	0.05	0.25
Helped me develop academic skills	EVA	2.08	0.14	0.44	415	0.66	0.06
	EVNA			0.47	102	0.64	0.06
Helped me to meet other students	EVA	3.64	0.05*	-1.40	416	0.16	-0.16
	EVNA			-1.48	102	0.14	-0.16
Helped me learn about academic dates and deadlines	EVA	3.52	0.06	0.30	415	0.76	0.04
	EVNA			0.33	106	0.74	0.04
Helped with financial issues	EVA	1.69	0.19	-1.23	415	0.22	-0.14
	EVNA			-1.35	107	0.18	-0.14
Contributed to my success as a college student	EVA	3.55	0.06	1.38	415	0.17	0.18
	EVNA			1.47	103	0.14	0.18

Note: EVA = Equal Variances Assumed, EVNA = Equal Variances Not Assumed, MD=Mean Difference, 2-t= significance 2-tailed, *p<.05

REFERENCES

- Adelman, C. (2004). *Principal Indicators of Student Academic Histories in Postsecondary Education, 1972-2000*. Washington, DC: U.S. Department of Education, Institution of Education Sciences.
- Astin, A. W. (1993). What Matters in College? *Liberal Education*, 79(4), 4.
- Barron, K.E., Harackiewicz, J.M., & Tauer, J. (2001). The Interplay of Ability and Motivational Variables Overtime: A 5 Year Longitudinal Study or Predicting College Success. *Annual Meeting of the American Educational Research Association*.
- Bean, J.P., and Eaton, S.B., (2000). A Psychological Model of Student Retention. In J.M. Braxton (ed.), *Reworking the Student Departure Model*, 48-61.
- Braxton, J. M., Hirschy, A. S., and McClendon, S. A. *Toward Understanding and Reducing College Student Departure*. ASHE-ERIC Higher Education Report, vol. 30, no. 3. San Francisco: Jossey-Bass, 2004.
- Budge, S. (2006). Peer Mentoring in Post-Secondary Education: Implications for Research and Practice. *Journal of College Reading and Learning*, 37 (1), 73-87.
- Cabrera, A., Nora, A., & Castaneda, M. (1993). College Persistence: Structural Equations Modeling Test of Integrated Model of Student Retention. *Journal of Higher Education*, 64(2), 123-139.
- Campbell, T., and Campbell, D., (2007). Outcome of Mentoring At-Risk College Students: Gender and Ethnic Matching Effects. *Mentoring and Tutoring: Partnership In Learning*, 135-148.
- Chickering, A.W., & Gamson,, Z.F. (1987). Seven principles of good practice in undergraduate education. *AAHE Bulletin*, 39 (7), 3-7.
- Chickering, A.W., & Gamson, Z.F. (1999). Development and adaptations of the seven Principles of undergraduate education, *New Directions for Teaching and Learning*, 75-81.
- Higgins, M. and Kram, K. (2001). Reconceptualizing Mentoring at Work: A Developmental Network Perspective. *The Academy of Management Review*, 26 (2), 264-288.

- Hunter, M.S. & Linder, C.W. (2005) First-Year Seminars. In M.L. Upcraft, J.N. Gardner, & B.O. Barefoot (Eds.), *Challenging and Supporting the First-Year Student: A Handbook for Improving the First Year of College*. San Francisco: Jossey-Bass.
- Jackson, A.P., Smith, S.A., and Hill, C.L. (2003). Academic Persistence Among native American College Students. *Journal of College Student Development*, 44, 548-565.
- Jacobi, M. (1991). Mentoring and Undergraduate Academic Success: A Literature Review *Review of Educational Research*, 61 (4), 505-532.
- Ishler, J.L. & Upcraft, M.L. (2005) The Keys to First-Year Student Persistence. In M.L. Upcraft, J.N. Gardner, & B.O. Barefoot (Eds.), *Challenging and Supporting the First-Year Student: A Handbook for Improving the First Year of College*. San Francisco: Jossey-Bass.
- Janasz, S. C., & Forret, M.L. (2008). Learning the Art of Networking: A Critical Skill for Enhancing Social Capital and Career Success, *Journal of Management Education*, 32 (5), 629-650).
- Komives, S., Woodard, D.B., and Associates. (2003). *Student Services: A Handbook for The Profession*. San Francisco: Jossey-Bass.
- Kram, K. (1985). *Mentoring at Work: Developmental Relationships in Organizational Life*. Illinois: Scott, Foresman and Company.
- Kuh, G.D. (2005). Student Engagement in the First Year of College. In M.L. Upcraft, J.N. Gardner, & B.O. Barefoot (Eds.), *Challenging and Supporting the First-Year Student: A Handbook for Improving the First Year of College*. San Francisco: Jossey-Bass.
- Kuh, G.D., Kinzie, J., Schuh, J.H, Whitt, E.J. and Associates. (2005). *Student Success in College: Creating Conditions that Matter*. San Francisco: Jossey-Bass.
- Kuh, G.D., and Love, P.R., (2000). A Cultural Perspective on Student Departure. In J.M. Braxton (ed.), *Reworking the Student Departure Model*, 196-212.
- Kuh. G.D., Pace, C.R., & Vesper, N. (1997). The Development of Process Indicators to Estimate Student Gains Associated with Good Practices in Undergraduate Education. *Research in Higher Education*, 38(4), 435-454.
- Ortiz-Walters, R., and Gilson, L. (2005). Mentoring in Academia: An Examination of the Experiences of Protégés of Color. *Journal of Vocational Behavior*, 67, 459-475.

- Padilla, R.V. (2009). *Student Success Modeling*. Sterling: Stylus Publishing
- Padilla, R.V., Trevino, J., Gonzalez, K., and Trevino, J. (1997). Developing Local Models of Minority Student Success in College. *Journal of College Student Development*, 38(2), 125-135.
- Pascarella, E. T., & Terenzini, P.T. (1991). *How College Affects Students*. San Francisco: Jossey-Bass
- Powers, K., (2006). An Exploratory Study of Cultural Identity and Culture-Based Educational Programs for Urban American Indian Students, *Urban Education*, 41 (20), 20-49.
- Tierney, W. (1999). Models of Minority College-going and Retention: Cultural Integrity Versus Cultural Suicide, *Journal of Negro Education*, 68, 80-91.
- Tierney, W. and Jun, A., (2001). A University Helps Low Income Youths for College: Tracking School Success, *The Journal of Higher Education*, 72 (2), 205-225.
- Tinto, V. (1987). *Leaving College*. Chicago: University of Chicago Press.
- Ullah, H. & Wilson, M. (2007). Students' Academic Success and Its Association to Student Involvement with Learning and Relationships with Faculty and Peers. *College Student Journal*, 41(4), 1192-1202.
- Upcraft, M.L, Gardner, J.N. and Barefoot, B. (2005). *Challenging and Supporting the First-Year Student*. San Francisco, Jossey Bass.
- Willingham, W.W. (1985). *Success in College: The Role of Personal Qualities and Academic Ability*; New York, College Board Publications.