

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

AN EVALUATION OF THE CSUN BUILDING CONNECTIONS FOR SUCCESS  
PEER MENTORING PROGRAM

A thesis submitted in partial fulfillment of the requirements  
For the degree of Master of Arts in Psychology,  
General Experimental

by

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## DEDICATION

This thesis is dedicated to my family, who mean everything to me, plain and simple.

## ACKNOWLEDGMENT

I would like to thank my committee for their help in completing this thesis.

To my chair, Dr. Plunkett, for your unending patience, insight, warmth, and generosity; in other words, your innate “plunkness.” I couldn’t imagine having gone through the GE program with any other mentor. My only wish is that you could take a position at the next school I attend, but then CSUN would be deprived of one of its greatest assets.

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## ABSTRACT

### AN EVALUATION OF THE CSUN BUILDING CONNECTIONS FOR SUCCESS

#### PEER MENTORING PROGRAM

by

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General-Experimental

The purpose of this study was to examine the effectiveness of a university peer mentoring program at a 4-year university in Southern California. Previous studies suggest that university peer mentoring can promote favorable academic and social outcomes for students. Also, peer mentoring might negate students' feelings of isolation and disengagement, which research suggests are principal factors for college dropout rates. Data were collected from 304 students at California State University, Northridge during the fall semester of 2012. Almost all were freshmen ( $M = 18.1$  years old). ANCOVAs were run comparing peer mentored students and non-peer mentored students on posttest perceptions of their first semester of college, as well as their familiarity with campus resources (while controlling for pretest scores). Also, paired samples  $t$ -tests were run to compare mentored students' pretest to posttest scores on the same outcome variables. Results indicated that students with a peer mentor felt significantly more integrated and connected to their university at the end of their first semester, compared to non-mentored students. Familiarity with campus resources did not differ significantly between groups. Results also indicated that mentored students' feelings of connectedness and integration,

as well as knowledge of campus resources, improved significantly by the end of their first semester. Participants also provided qualitative responses for what they found beneficial about the program, as well as suggestions for improvement. Evidence was provided that the peer mentoring program was successful in acclimating students to college, which in turn might reinforce their persistence towards staying in school and graduating on time. The results might be referenced when implementing future incarnations of the program, as well as similar programs at other universities.

## CHAPTER I

### INTRODUCTION

Earning a 4-year college degree is an important determinant of both professional success (Baum & Ma, 2007) and personal satisfaction (Hattiangadi, Medvec, & Gilovich, 1995). In light of this, universities have developed programs specifically designed to improve retention and graduation rates (ACT, 2010). University peer mentoring programs have been successful in improving academic achievement (Salinitri, 2005), student retention (Ward, Thomas, & Disch, 2010), and knowledge of campus resources (Alonso, Castano, Calles, & Sanchez-Herrero, 2010). California State University Northridge (CSUN) received a grant funded by the Title V program from the U.S. Department of Education to promote student retention and improve its four to six year graduation rate (Plunkett, Welsh, & Seegan, 2012).

One major component of the Building Connections for Success grant is a peer mentoring program for freshmen enrolled in UNIV 100, an introductory class designed to prepare students for the rest of their college career (CSUN, 2011). To demonstrate that the grant money is well utilized, it is important to evaluate the effectiveness of this program. Also, it is beneficial to conduct process evaluation as a means of adjusting the program to participants' needs and/or improving the program after it has been established. Thus, this thesis serves as an evaluation of the Building Connections for Success peer mentoring program.

#### **Statement of the Problem**

CSUN's freshmen retention rates and 6-year graduation rates are among the lowest in the CSU system (Plunkett et al., 2012). Given the resources devoted to public

universities, as well as the increasing need for a college educated workforce, it is critical that steps be taken to reverse these trends. Initiatives such as CSUN's Building Connections for Success program specifically aim to engage college students and help them persist in their education.

Many community-based and university-based programs do not conduct sufficient evaluation (Winkler, 2012), or bypass the process altogether in order to concentrate all of the funding into the program itself (Foster, 2001). Also, many programs that do engage in evaluation focus primarily on outcome evaluation, with little attention given to process/formative evaluation (i.e., ongoing evaluation to improve the program; Frechtling, 2002). Thus, it is important for programs to perform high quality evaluation, especially to justify the funds spent on the evaluation and to ensure the program meets the needs of participants.

### **Purpose**

The purpose of this study was to evaluate a peer mentoring program for university undergraduate students. The goal of the peer mentoring program is to enhance mentees' feelings of connectedness to the university so as to increase retention and graduation rates of the mentees. The purpose of the evaluation will be to provide useful information to the program directors to modify the program if needed, and to demonstrate whether the program is meeting its stated objectives. It is expected that the results of the evaluation will benefit the director and administrators of the project, future program participants, and others working on or considering similar programs.

### **Definitions**

1. Peer mentor refers to a person who uses his/her experience to provide guidance,

- support, and practical advice to another person who is close in age and/or shares common characteristics (Kram, 1983).
2. Mentee refers to a person who receives mentoring (Terrion & Leonard, 2007).  
Mentees are also referred to as protégés.
  3. Program evaluation is a method of defining a program's goals and then gathering and reporting usable data to appraise the program's effectiveness in light of these goals (McNamara, 2002). What distinguishes program evaluation from less formal evaluation procedures is its foundation in the scientific method and related concepts such as validity (McNamara, 2002).
  4. Accountability evaluation assesses a program's success in terms of being a productive and worthwhile endeavor (Priest, 2001). Specifically, data relating specifically to a program's impact, as well as efficient allocation of resources, are useful in communicating the program's value to investors and stakeholders (Radhakrishna & Martin, 1999).
  5. Formative evaluation refers to a phase of the evaluation process that occurs throughout the duration of a program to assess the degree to which a program is adhering to its core objectives (Frechtling, 2002). Formative evaluation is designed to provide immediate feedback for program administrators to use for decision making and amending the program as needed (Nan, 2003). Thus, formative evaluation answers the question, "Is the program running as it should be?"
  6. Outcome evaluation refers to the phase of the evaluation process that occurs at the end of the program and assesses the impact or results of the program on its target population (Priest, 2001). Thus, outcome evaluation answers the question, "Did the

- program do what it was supposed to do?”
7. Retention of program participants refers to the number of people who successfully complete a program or course of action, versus those who drop out or leave the program (Martinez, 2003).

## **Research Hypotheses and Questions**

### **Research Hypotheses**

Based on the review of literature in Chapter 2, the following research hypotheses were developed.

1. It is hypothesized there will be a significant increase in institutional connection and integration into the university from pretest to posttest for students who have a peer mentor.
2. It is also hypothesized that students with a peer mentor will report significantly greater institutional connection and integration into the university at posttest compared to students who were not assigned a peer mentor, even after controlling for pretest scores.
3. It is hypothesized there will be a significant increase in knowledge of campus resources from pretest to posttest for students with a peer mentor.
4. It is hypothesized that students with a peer mentor will have significantly increased knowledge of campus resources at posttest compared to students without a peer mentor, even after controlling for pretest scores.

### **Research Questions**

In addition to the research hypotheses, this thesis will also address the following research questions.

1. Is the peer mentoring program perceived as beneficial, helpful, and worthwhile by the student participants?
2. Are the peer mentors perceived as beneficial, helpful, and worthwhile by the student participants?
3. Are there components of the peer mentoring program that can be improved?

### **Assumptions**

This evaluation study was created based upon certain assumptions. The assumptions are outlined below.

- Participants in the peer mentoring program (i.e., mentees, mentors) will not be pressured by the program evaluators or by the program coordinators to take part in the study.
- Participants in the peer mentoring program will be able to read and understand questionnaires written in English since the participants are current students in a comprehensive university in the United States.
- Participants' survey responses will be truthful and complete.
- The study will use appropriate measures that are relevant to a sample of ethnically diverse university students.
- Data entry and coding will be accurate and error free because only trained research assistants will work on the study, and all data entry and coding will be double checked for accuracy.
- Data analyses will be accurate and error free because a statistician will be consulted when conducting the analyses and interpreting the results.

## CHAPTER II

### REVIEW OF LITERATURE

#### **University Graduation and Future Success**

The benefits of higher educational attainment are well documented. College graduates earn on average 61% more over their careers compared to high school graduates with no college degree (Baum & Ma, 2007). As of November 2011, the unemployment rate of people over age 25 in the United States with a high school diploma but no college education was 8.8%, twice as high as those with at least a bachelor's degree (United States Department of Labor, 2011). Higher educational attainment has been associated with more knowledge of world affairs and decreased levels of prejudice (Rowley & Hurtado, 2002), as well as higher verbal memory and verbal fluency in middle age (Hatch, Feinstein, Link, Wadsworth, & Richards, 2007).

In a survey asking participants to rank their biggest regrets, items relating to regret over failure to pursue or finish one's college education were selected most frequently, more so than regrets about family, social relationships, and career choices (Hattiangadi, Medvec, & Gilovich, 1995). Kinnier and Metha (1989) found similar results, with regrets about educational attainment being prevalent over other regrets across three age groups: (a) 20 to 29 years of age, (b) 35 to 55 years of age, and (c) over 65 years of age. Given the emphasis others place on higher education, a college degree is significant for improved career prospects, social mobility, and a sense of personal accomplishment.

College educated citizens benefit society as well. A study by the College Board found that university graduates pay more in taxes, are more likely to vote, and are less likely to be incarcerated (Baum & Ma, 2007). College graduates are also less likely to rely

on government assistance (Institute for Higher Education Policy, 1998). President Barack Obama emphasized in his 2010 State of the Union address that increasing the number of college graduates in the U.S. is critical to remaining competitive in the global economy (Obama, 2010). Given the value of earning a college degree for both the individual and society, it is worthwhile to examine factors that influence university retention and graduation rates.

## **University Retention and Graduation**

### **Risk Factors of Dropping Out of the University**

Although college dropout rates are difficult to track as some students end up finishing their degrees at other institutions, less than half of the people who enroll in college in the United States will obtain a degree within six years (Marklein, 2009). Dropping out of college is detrimental to both the student and the public as well, since tax dollars are wasted subsidizing student loans that don't result in a degree (Schneider & Yin, 2011).

There are a variety of factors that contribute to dropping out or terminating one's college education without obtaining a degree. Lower first year grades and lower high school GPAs have both been associated with higher attrition rates (Bradburn, 2002; Murtaugh, Burns, & Shuster, 1999), as has poor class attendance (Hammond, 2007). Financial considerations include lower socioeconomic status and having to work while going to school (Hammond, 2007). Other proposed causes of dropping out include depression (Pleskac, Keeney, Merritt, Schmitt, & Oswald, 2011), lower self-confidence, and lower academic motivation (Lotnowski, Robbins, & Noeth, 2004).

Students' level of involvement with the university is an important determinant of

their academic success (Tinto, 1997). Students who feel less integrated and connected to their university might be at a greater risk for dropping out without earning a degree. Not surprisingly, a sense of disengagement from the university has also been linked to dropping out of college. A study of university freshmen in the Midwest found that the degree of institutional commitment was the strongest predictor of dropout rates for both male and female freshmen (Bean, 1980).

A study by Pascarella and Terenzini (1983) examined the relationship between students' pre-enrollment demographics (e.g., socioeconomic status, high school class rank), social integration at the institution, and retention of students after their freshmen year. The results found that social integration was a mediator between student characteristics and retention. The results of the study suggested that university integration might be a stronger determinant of persistence than personal characteristics of the students.

Another study compared students at four different types of colleges (i.e., two year commuter colleges, four year liberal arts universities, four year residential universities, and four year commuter universities) on student retention (Chapman & Pascarella, 1983). The researchers found that students who were more involved in non-academic pursuits at their particular institution and/or interacted more with faculty outside of the classroom were more likely to stay in school.

A study of non-academic characteristics related to dropping out of college found that feelings of being marginalized by the campus environment were significant in predicting dropout risk for an undergraduate student sample (Mcgaha & Fitzpatrick, 2005). Johnson (1997) found that students who associated more often with faculty were

less likely to drop out.

### **Promotion of University Retention**

Based on the studies listed in the previous subsection, programs can help students stay in school when the program increases students' academic motivation and grades and/or provides emotional support to help students who are dealing with stressors and mental health issues. Also, programs that can increase social integration with other students and/or faculty, decrease marginalization, and increase connection to the university have potential for improving the retention and graduation of the students. Retention oriented services such as tutoring, advisement, first year courses that teach study skills, and mentoring programs are seen as helpful in improving retention and graduation rates (ACT, 2010). Peer mentoring programs are one resource available on many campuses which can help students feel more connected to the university, which in turn increases the likelihood of them graduating.

### **Value of Mentoring Programs at the University**

Mentoring takes place when a relationship forms between an older or more experienced person and a younger or less experienced person, in which the mentor provides both practical guidance and social support for the mentee (Bozeman & Feeney, 2007). Guidance most often comes in the form of advice on career development, as in the case with workplace mentoring, or study skills as in the case with school based mentoring (Karcher, Kuperminc, Portwood, Sipe, & Taylor, 2006). The emphasis on a personal, emotionally supportive relationship is what qualitatively separates mentoring from other forms of training or tutoring (Karcher et al., 2006).

Peer mentoring occurs between people sharing common experiences or interests

and who are often similar in age (Kram, 1983). A university peer mentoring program refers to an intervention strategy that pairs one or more students (i.e., mentees) with a more experienced student (i.e., peer mentor) (Terrion & Leonard, 2007). University peer mentoring programs are designed to foster positive outcomes (Terrion & Leonard, 2007), including higher academic achievement and social acclimation (Leidenfrost, Strassnig, Schabmann, Spiel, & Carbon, 2011).

Sanchez, Bauer, and Paronto (2006) evaluated a university peer mentoring program for first year business majors ( $n = 128$ ) at a school in the Midwest. Freshmen students were paired with senior business majors who had at least a 3.5 GPA. Longitudinal data were collected before, during, and at the conclusion of the program. Participation in the program significantly and positively predicted satisfaction with the university, and somewhat predicted level of commitment to the university. Quality of the peer mentoring relationship, as assessed by the mentees themselves, was significant and positive in predicting satisfaction with the university and moderately predicted future level of organizational commitment. Students in the mentoring group had a stronger desire to graduate on time and a lower desire to drop out, compared to the non mentored students.

Another peer mentoring program was evaluated at the University of Vienna in Austria (Leidenfrost et al., 2011). Groups of eight to ten freshmen psychology majors ( $n = 376$ ) were randomly assigned to one of forty-nine mentors, who were mostly seniors in the psychology department. Mentoring took place both in person and through online discussion boards. Support was found for connection between mentoring style and subsequent evaluations of the mentors. Mentors who were the most heavily involved and

who posted the most informative and positive feedback in the online discussion boards, as measured by length and affective valence of comments, received the highest evaluations by mentees. Mentors who were the least involved in online activities and who posted the most negative commentary were evaluated more poorly by their mentees. Mentees who rated their mentors positively experienced higher academic achievement, although mentees who rated their mentors negatively did not perform worse academically, as was hypothesized.

A peer mentoring program was conducted for students enrolled in an introductory level biology course ( $n = 1,192$ ) to aid transition to the college environment at a university in Ontario, Canada (Goff, 2011). Upperclassmen who had taken the biology course were recruited to lead five brief mentoring sessions throughout the semester, consisting of small groups of the first year students. Given that participation was voluntary, mentees were grouped based on having low, average, or high attendance at the mentoring sessions. Level of attendance significantly predicted final grades in the biology course. Level of attendance was not significantly related to ease of transitioning to college, nor was participation in the course significantly related to increasing participants' tendency to select biology as a major, as was hypothesized.

A peer mentoring program took place for low achieving first year students ( $n = 128$ ) at the University of Windsor, Canada (Salinitri, 2005). Participants were from two freshmen cohorts (2001 and 2002) in the school's department of arts and social sciences whose high school grades approximated a 'C' or 'C-' average. Mentors were teaching candidates from the school's department of education. Mentors were each assigned one or two mentees. First semester GPA was significantly higher for both mentee cohorts as

compared to the control groups. The number of students failing at least one course in the first semester was significantly less in the mentee cohort groups as compared to the control groups. Mentees were significantly less likely to be on academic probation as compared to the control groups. Qualitative analyses found that mentees were generally satisfied with their mentors and the mentoring experience, with several mentees stating that they had become friends with their mentors outside of the program.

A peer mentoring program took place at Curtin University of Technology in Australia (Breen, Drew, Pike, Pooley, & Young, 2001). Participation was voluntary for students enrolled in an introductory psychology course. Mentees ( $n = 42$ ) taking part in the program for the fall semester of 2000 were assigned to one of thirty-one mentors, who were all second or third year students. In an evaluation of the previous year's program, dropout rates were significantly less for mentees than non mentees. An evaluation survey completed by the current year's mentees indicated overall moderate satisfaction with the program. Mentees were grateful for the social support and advice regarding coursework and university policies. It was suggested that the voluntary nature of the program lead to enrollment by students who already possessed the skills necessary to succeed in college, while students most in need of mentoring were less inclined to participate.

Recommendations for future peer mentoring programs at the university included having all incoming students assigned to a mentor.

A peer mentoring program was carried out for freshmen enrolled in the honor's program at the University of Tennessee (Malia, 1999). Acceptance into the honors program was based on scholastic achievement in high school, including grades and extra curricular activities. Either one or two incoming freshmen were paired with an

upperclassmen mentor also in the honors program, typically a sophomore or junior.

Follow-up questionnaires were filled out by the mentees at the end of the first semester ( $n = 48$ ) and the end of the second semester ( $n = 44$ ). Results indicated that the majority of the students were satisfied with the program, and approximately two thirds responded that they were interested in becoming mentors for the program the following year. Most respondents found their mentors' advice to be helpful. Most of the advice pertained to academics, followed by advice about involvement in student organizations.

A peer mentoring program took place for undergraduate students showing interest in pursuing psychology as a major at Nazareth College in New York (Hughes & Fahy, 2009). Approximately ten to fifteen upperclassmen were recruited in the spring semester preceding the start of the following academic year. Many of them expressed interest in becoming mentors because they regretted not being more involved or more integrated into the psychology department in their own first year. Surveys were distributed to both mentors and mentees at the end of the first year. Mentees ( $n = 27$ ) reported positively on the effects of the program, including familiarization with the faculty and other students in the program, knowledge of the curriculum, and feeling like an active member of the psychology department. Results indicated overall satisfaction with the mentoring program, although the study lacked a control group.

A peer mentoring program lasting six months was conducted in the psychology department at Complutense University in Madrid, Spain (Alonso, Castano, Calles, & Sanchez-Herrero, 2010). Fifth year students studying psychology with an emphasis on work psychology were enlisted to mentor one or two students on the same course of study, but one academic year behind them. The start of the fourth year was seen as crucial

for students in the program because that was when they began their practicums. Pretest and posttest measures were taken for two groups of the fourth year students: mentees ( $n = 47$ ) and non-mentees ( $n = 41$ ). A pretest survey assessed participants' knowledge of an "academic setting" as well as specific resources on campus. Items addressed information about the library, university administration, student services, and computer labs, as well as job placement agencies and professional organizations that would help them pursue graduate studies or a career in psychology. Results indicated that although mentees had the same amount of knowledge as non-mentees before the program, mentees had higher knowledge than non-mentees after the mentoring program. Therefore, the mentoring program was beneficial in increasing mentees' awareness of the academic resources available to them, both in general and within the field of psychology.

A peer mentoring program was conducted for first year students in the Master of Business Administration program at an undisclosed university in the southeastern United States (Allen, McManus, & Russell, 1999). Groups of two or three second year MBA students were assigned to groups of five or six of the mentees. Further, one-on-one meetings between mentors and mentees took place in addition to the group sessions. Surveys were filled out by the mentees ( $n = 64$ ) at the end of the first year. Results showed that social and practical support provided by the mentoring process contributed to greater overall perceived socialization for mentees, specifically in regards to knowledge of organization politics and to work efficacy. There was also a significant and positive relationship between mentees' perception of how well the mentors met their mentoring obligations with mentees' reported ability to cope with stress. Thus, evidence was provided that peer mentoring might aid in social integration and might help negate

stressful situations.

A peer mentoring program for engineering students at the University of Cape Town in South Africa was evaluated (Ahmed, 2011). Senior engineering students were each matched with between five and twelve first year engineering students ( $n = 564$ ), whose participation as mentees was voluntary. Questionnaires filled out by the mentees before their second semester indicated overall success of the program. Approximately four fifths of the mentees said they would recommend the program for future students, while three quarters of them requested mentors for the following semester. About half of the mentees stated that their schoolwork benefited indirectly as a result of having a mentor, with one mentee reporting that he or she worked harder as a result of his or her mentor emphasizing the difficulty of the coursework. Another felt that he or she would have failed his or her classes had she or he not had a mentor that semester. Satisfaction with the mentoring program increased as a function of how often mentors associated with their mentees.

A peer mentoring program was carried out during the spring semester of 2008 at Saint Xavier University in Chicago, Illinois (Ward, Thomas, & Disch, 2010). Mentees ( $n = 34$ ), consisting of mostly freshmen, in addition to several sophomores and one junior, had all received less than a 'C' in at least one class during the fall semester. Twelve mentors were selected from among juniors and seniors who had a GPA of at least 2.5. The mentors were assigned mentees in a one-to-three ratio and met with them weekly. Results of the program demonstrated a positive effect of the mentoring program on the mentees. Mentors used monthly progress reports to make note of their mentees' progress towards self-identified academic and personal goals. Results of the program were

encouraging. There was a significant and positive difference between mentees' attitudes towards academic, social, and career goal attainment from before the program and after the program, as assessed by the mentors through their monthly reports. The retention rate of freshmen mentees was more than ten percent higher than the overall freshmen retention rate of the university. Therefore, evidence was provided that peer mentoring has an effect on retention rates, as well as on advancing students' attitudes towards goal attainment.

Milne, Keating, and Gabb (2007) conducted an evaluation of several peer mentoring programs at Victoria University in Melbourne, Australia. There was variety in the models being used, such as some programs being mandatory for mentees while others were voluntary. Mentoring generally took the form of one or two mentees meeting with small groups of students. Activities were mostly oriented towards academics and facilitating the transition from high school to college. Mentees enjoyed the informal nature of the meetings, where they could learn and exchange ideas with both mentors and other mentees. They appreciated getting advice about the adjustment to college life from mentors who had lived through similar experiences. Mentees also benefited from the opportunity to socialize with one another, and were reassured upon finding out that they were not alone in their doubts or insecurities about college. Most mentees reported that their subject knowledge had increased as a result of the program.

### **The CSUN Building Connections for Success Peer Mentoring Program**

The CSUN Building Connections for Success program is a federally funded program that aims to help economically disadvantaged students succeed at California State University Northridge (Building Connections for Success, 2011). Latinos comprise

36% of the student population, which makes them the largest ethnic group on CSUN's campus (<http://www.collegeportraits.org/CA/CSUN>). CSUN is designated as a Hispanic Serving Institution (HSI), under Title V of the Higher Education Act (U.S. Department of Education, 2011). Grants provided through Title V for HSI are intended for the development of educational opportunities for Hispanic students (U.S. Department of Education, 2011).

The CSUN Building Connections for Success program was launched in October of 2010 and is expected to meet its objectives within five years (Building Connections for Success, 2011). The program expands its services each year to include the five colleges within the CSUN campus that have the lowest graduation rates. These include, successively, the College of Health and Human Development, the College of Business and Economics, the College of Science and Mathematics, the College of Social and Behavioral Sciences, and the College of Engineering and Computer Science (Building Connections for Success, 2011).

The 6-year graduation rate of CSUN students for 2008 was 41%, while the 6-year graduation rate of Latino/a students stood at 34% for the same year (Plunkett et al., 2012). This is noticeably lower than the CSU average of 49% for all students in 2008 and 41% for Latino/a students in that same year. CSUN's graduation rate is ranked 19<sup>th</sup> out of 23 CSU campuses, while the graduation rate of Latino/a students ranks 20<sup>th</sup>. Similarly, the 1-year retention rate of CSUN freshmen is 71%, which falls behind the CSU average of 79%. This places CSUN's freshmen retention rate at 18<sup>th</sup> out of the 23 CSU campuses (Plunkett et al., 2012). To remedy these issues, the CSUN Building Connections for Success program aims to improve freshmen retention rates as well as 6-year graduation

rates among undergraduate students at the university (Building Connections for Success, 2011). The program aims to increase the retention rate of Latino/a students by 25% from 2010 to 2015, in yearly increments of 5% (A. Garcia, personal communication, October 4, 2012).

It is expected that the program will benefit all students who participate, but only retention rates of Latino/a students are tracked for the grant (A. Garcia, personal communication, October 4, 2012). Graduation rates of Latino/a students are also targeted for improvement, although graduation rates of program participants are not available yet since the program is only in its third year (A. Garcia, personal communication, October 4, 2012). The program aims to achieve its goals through a multifaceted plan, including expansion of the peer and faculty mentoring programs, career advisement services, expanded services for students needing help in remedial math, pairing students with local non-profit organizations to perform community service, and working with local high school juniors and seniors to increase awareness of the importance of college education (Building Connections for Success, 2011).

### **Peer Mentoring Program**

One component of the Building Connections for Success (2011) initiative is the peer mentoring program. Freshmen at CSUN are given the opportunity to enroll in The Freshmen Connection, which places them into a cohort of 20-25 students who take classes together during their first semester. One of the available classes is University (UNIV) 100, an introductory course designed to familiarize freshmen with a college environment and help them prepare for the rest of their academic career (<http://www.csun.edu/afye/Freshman-Connection-Home.html>).

For the Fall 2012 semester, there were fifty-two sections of UNIV 100. Twenty-two of these sections were devoted to freshmen taking part in the peer mentoring program (A. Garcia, personal communication, October 4, 2012). The freshmen in the remaining thirty sections still completed one semester of UNIV 100 but were not assigned a peer mentor. This non mentored cohort served as a control group for the purpose of evaluation.

Topics covered in UNIV 100 include study skills, time management, learning the CSUN course catalog, learning the university's core values, critical thinking, effective university discourse, ethical thinking and behavior, and tutorials in financial aid and financial planning (A. Garcia, personal communication, October 4, 2012). Students are required to complete work sheets, reflection papers, essays, and a group project. They are also assigned one novel that is read by all CSUN freshmen in each fall semester, under the university's Freshman Common Reading Program.

Each cohort consists of 20-25 students, divided equally between two mentors (A. Garcia, personal communication, October 4, 2012). Some cohorts receive only one mentor if the mentor has a great deal of experience. The peer mentored sections of UNIV 100 are structured such that mentors actively model effective in-class behaviors for their mentees to follow (A. Garcia, personal communication, October 4, 2012). For instance, the mentors are expected to show up on time to class, sit up straight in their chair, take initiative in asking questions of the instructor, and keep their cell phones out of sight. The UNIV 100 classes meet twice a week, with mentors being required to attend at least once a week. The mentors are trained to spot warning signs that a student is not doing well, such as consistently showing up late to the UNIV 100 class or not participating in class activities (A. Garcia, personal communication, October 4, 2012). If deemed necessary, the

mentor will intervene and help the student to get back on track (A. Garcia, personal communication, October 4, 2012).

Other than participating in class, there are three specific activities throughout the semester in which the mentors engage their mentees (A. Garcia, personal communication, October 4, 2012). The first is a one-on-one meeting between the mentor and each of his or her mentees. The meeting lasts about 30 minutes, and the mentor takes the opportunity to get acquainted with the mentee (e.g., learning about their background, hobbies, interests, and career goals). The second activity has the mentors work with each of his or her mentees to identify one academic resource on campus that the mentee would like to utilize (e.g., library, counseling services, academic advisement). The mentor then helps familiarize the mentee with the selected resource. For the third activity, the mentor arranges for a group of three to four mentees to attend an event on campus that is not part of the Building Connections for Success Program. For instance, the group could attend a CSUN sporting event, a free musical concert on campus, or take a tour of the campus art gallery.

The mentee cohorts are discipline-based, meaning that the mentees are grouped together according to their intended majors within each department (A. Garcia, personal communication, October 4, 2012). Participating departments include the College of Health and Human Development, the College of Science and Mathematics, the College of Social and Behavioral Science, and students of Business and Pre-Accountancy. There are also cohorts for students who have not yet declared a major. While most of the mentors are undergraduates, the cohort within the College of Social and Behavioral Sciences is unique in that its mentors are graduate students in a counseling master's program (A.

Garcia, personal communication, October 4, 2012).

Potential mentors are recruited either after successfully completing the Building Connections for Success program as mentees or by responding to flyers in the EOP office or various advisement offices (A. Garcia, personal communication, October 4, 2012). They are required to have a cumulative grade point average of at least 3.0 and to have strong interpersonal skills. It is desirable, but not necessary, that applicants have prior experience in mentorship roles. Additionally, mentors are screened based on the major they are in so that they can be matched with the appropriate discipline-based cohort, unless they are assigned to a cohort of undecided freshmen. Once they are hired, mentors undergo training on effectively meet the needs of their mentees and addressing the specific needs of Latino/a students. The mentors are required to keep daily logs of their mentoring activities. UNIV 100 instructors also give feedback on the mentors' performance. Mentors are paid an hourly wage and generally work about five or six hours a week for the program, which totals from fifty to sixty hours over the whole semester (A. Garcia, personal communication, October 4, 2012).

## **Evaluation Research**

### **The Importance of Evaluation Research**

As nonprofit programs continue to proliferate while state and federal budgets continue to shrink, programs face the challenge of competing for funding (McNamara, 2002). Therefore, in order to justify investment of resources, it has become increasingly important for programs to demonstrate their value. The Government Performance and Results Act (GPRA) dictates that agencies using federal funds report on their goal progress annually, including identifying general project goals, as well as demonstrating

quantifiable results (Frechtling, 2002). Evaluation research can aid in this process by offering a scientifically rigorous, theory based approach to answering questions about a program's worth (Shadish, Cook, & Leviton, 1991).

Evaluation services provide a way of assessing a program's strengths and weaknesses based on accurate, objective data (Wolfe & Miller, 1994). Although many programs recognize the need for effective evaluation, dedicated evaluators are often required, as program workers may lack knowledge of research methods and statistical analyses (Antonie, 2011). The structured approach of formal evaluation might provide insights into a program that would otherwise have been missed (McNamara, 2002). In the absence of a formal evaluation, program administrators might resort to guessing or trial and error on how best to satisfy stakeholders and to improve the program (McNamara, 2002).

Systematic evaluation addresses concerns vital to all aspects of a program's functioning. Frechtling (2002) asserts that evaluation should be inherent to a program's execution, not merely appended before or after as needed. The information obtained in an evaluation lets stakeholders know if the program is working or not working, and serves an educational purpose for those actually running the program by letting them know what can be done to improve the program (Aubel, 1999). A successful program evaluation might help define specific goals for a program (Muraskin, 1993), aid in comparing several different models of a program to determine which is most effective (Mallonee, 2000), and help make policy decisions (Shadish et al., 1991).

### **Types of Evaluation Research**

Program evaluation encompasses many specific types of evaluation (McNamara,

2002). Some of these include formative, implementation, summative, and progress evaluation. This study will focus specifically on formative, accountability, and outcome evaluation (Frechtling, 2002).

**Formative evaluation.** Formative evaluation refers to ongoing evaluation that follows the evaluation process from start to finish (Frechtling, 2002). It is composed of implementation and progress evaluation. Implementation is making sure the program is running in a manner consistent with its stated purpose (Frechtling, 2002). Areas of interest include participant recruitment methods, identification of a suitable participant pool, and seeing if the program is operating according to the administrative procedures outlined in the planning stages. Progress evaluation is a means of assessing whether or not the program is actually meeting its goals and can take place several times throughout the evaluation (Frechtling, 2002). For example, during evaluation of an educational intervention for students' math skills, data might be collected several times throughout the semester to see if student achievement in math continues to increase after the intervention (Burns, 2010).

Formative evaluation provides accessible and immediate feedback in both the planning and execution of a program (Nan, 2003). It can enhance a program by providing suggestions for improvement while the program is taking place and not just at the conclusion of the program. Such rapid feedback from the evaluation can aid in revising strategies or developing new ones when existing strategies are shown to be ineffective (Nan, 2003).

**Accountability evaluation.** Accountability evaluation looks at whether or not a program is fulfilling its obligations in the eyes of stakeholders (Priest, 2001). It is a way

of making sure resources are being utilized appropriately and responsibly (Priest, 2001). Accountability can be demonstrated using performance indicators, which are data driven benchmarks through which program results are judged in specific areas. Descriptive statistics are also important in serving as a reference for measures of accountability. These might include demographics of participants, dropout rates for the program, keeping track of how people found out about the program, and duration of the program (Frechtling, 2002).

Accountability is critical to the evaluation process because it demonstrates credibility of the program to stakeholders (Rutman, 1980), clients receiving services of the program (Astramovich, 2007), and the public at large, since nonprofit programs are funded by tax dollars (Lee, 2004). Program administrators must not only run successful programs, but should also be able to communicate the effectiveness of their programs in order to justify current and future funding (Hoefler, 2009).

**Outcome evaluation.** Outcome evaluation takes place after the program is finished and aims to find out if it worked as intended (Priest, 2001). Results are typically examined in terms of changes in the participants' performance or behavior as a result of the program (Priest, 2001). Comparisons might be made to a hypothesized model of expected outcomes (Priest, 2001), or to results within the program or to other programs of a similar nature (Office of Juvenile Justice and Delinquency Prevention, 1989). It is important to distinguish outcomes, or observable differences as a result of the program, from outputs, which are numerical accounts of various aspects of the program (McNamara, 2002). For instance, explaining that a certain number of people were enrolled in a program is merely descriptive (i.e., accountability evaluation) and does not

indicate whether or not the program was successful (McNamara, 2002).

Specific issues addressed by outcome evaluation include whether or not the program was effective, if the expenditure was justified, and whether or not the program is worth continuing or duplicating (Frechtling, 2002). Outcome evaluation is important in determining if programs are producing tangible results (McNamara, 2002). Outcome evaluation can be useful in shaping the direction of similar programs in the future. Based on the results of an outcome evaluation, a decision might be reached to continue, discontinue, or modify the program in question (Frechtling, 2002).

CHAPTER III  
METHODOLOGY

**Procedures**

The study utilized a pretest-posttest, comparison group design. Data were collected in the form of self-report surveys that included basic demographic information, forced response choice questions, and open-ended response questions. The CSUN Committee for the Protection of Human Subjects (Research Protocol #1213-002) approved the study on August 23, 2012.

The target sample was all University 100 classes where students were part of the Building Connections for Success program. The comparison group included University 100 students who were not part of the Building Connections for Success program. A few sections of University 100 were excluded from the comparison groups to make the treatment and comparison groups more similar. Specifically, the honors sections and the section for deaf and hard of hearing were excluded.

Surveys were taken online using the Qualtrics.com software. A link to the pretest survey was emailed to participants at the beginning of the fall semester, and a link to the posttest was emailed at the conclusion of the semester. Additionally, reminder emails were sent to increase participation. Email addresses were taken from class lists and uploaded into Qualtrics' secure server. Using a security feature of Qualtrics, a unique identification code was assigned to each email address and then the identification code was used to match the pretest and posttest surveys to ensure anonymity. Data from the completed surveys were exported to a spreadsheet. Qualitative responses were coded by the researcher, and then double-checked by a trained research assistant. To increase

participation, incentives in the form of office supplies were provided at pretest, and \$15 Target gift cards were provided as incentives at posttest. Specifically, a raffle at both pretest and posttest was held, and 15 respondents were randomly selected from the list of email addresses that were associated with complete surveys.

### **Sample Characteristics**

Out of 1071 students contacted to take the survey, 460 completed the pretest, and 364 completed the posttest. After matching participants with both complete pretest and posttest surveys, 304 students were included in the final sample (162 with a peer mentor and 142 without a peer mentor). The total sample was 69.1% female students ( $n = 210$ ) and 30.9% male students ( $n = 94$ ). The average age of the sample was 18.1 years old. The sample was composed almost entirely of freshmen (98.5%). Also, 69.4% of the students reported that neither of their parents had a college degree ( $n = 211$ ), while 30.6% of the students reported that at least one of their parents had a college degree ( $n = 93$ ).

The total sample was predominantly Hispanic/Latino (63.8%), with the next most common ethnicity being Asian/Pacific Islander (11.5%), followed by Caucasian/White (9.5%), Middle Eastern or Armenian (7.2%), African American/Black (6.6%), and mixed/other (1.3%). The most common birth country for the students was the United States (82.7%), followed by Mexico (4.4%), and the Philippines (2.0%). The most common mothers' birth country was Mexico (35.1%), followed by the United States (25.4%), El Salvador (10.7%), and Guatemala (6.9%). The most common fathers' birth country was Mexico (40.8%), followed by the United States (20.2%), El Salvador (10.5%), and Guatemala (6.3%). Most of the students were undecided as to their major (47.1%), while 11.1% identified as biology majors, 5.7% identified as kinesiology

majors, and 5.4% indicated they were psychology majors.

### **Measures**

**Pretest.** A 32-item survey was administered online at pretest (see Appendix A). Demographic information was collected, including age, ethnicity, intended major, and parents' birth countries. An 11-item scale measured students' initial impressions of CSUN during the first few weeks of their freshmen year. Sample items included, "I feel very integrated into the CSUN community," "I feel a strong, positive connection to CSUN," and "I have at least one person I can turn to for emotional support at CSUN." Response choices ranged from 1 to 6, with 1 = *strongly disagree*, 2 = *disagree*, 3 = *somewhat disagree*, 4 = *somewhat agree*, 5 = *agree*, and 6 = *strongly agree*. Next, participants were asked how familiar they were with each of 12 campus resources, including the Career Center, Financial Aid Office, and University Counseling Services. Response choices ranged from 1 to 6, with 1 = *not familiar*, 2 = *little familiar*, 3 = *somewhat familiar*, 4 = *familiar*, and 5 = *very familiar*.

**Posttest.** At posttest, the participants were presented the same questions regarding their impressions of CSUN and knowledge of campus resources, as well as additional items, depending on whether or not they had a peer mentor (see Appendix A). After the initial 23 items, students were asked to respond "yes" or "no" to the question, "Did you have an assigned peer mentor in your UNIV 100 class?" Students who answered "no" were finished with the posttest questionnaire at that point, while students who were assigned a peer mentor were directed to a series of new questions. First, they were asked to rate their agreement with nine statements about their peer mentor, such as: "Provided helpful resources," "Was supportive," and "Informed me about CSUN events (e.g., Big

Show, plays, sport events, carnivals).” Response choices ranged from 1 to 4, with 1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, and 4 = *strongly agree*.

Next, students were asked to rate their peer mentor on each of eight attributes, including “Had a positive attitude,” “Cared about my academic success,” and “Overall rating of the peer mentor.” Response choices ranged from 1 to 5, with 1 = *very low*, 2 = *low*, 3 = *average*, 4 = *high*, and 5 = *very high*.

Next, participants were asked, in open-ended format, “What did you find was beneficial about the peer mentors?” and “How could the peer mentors be improved for next year?” Then, the next two questions asked how frequently they used their “Building Connections for Success” binder, as well as their “My Career Plan” booklet. Response choices ranged from 1 to 4, with 1 = *not at all*, 2 = *once*, 3 = *a few times*, and 4 = *frequently*. Then, they were asked, in open-ended format, “How do you see yourself using the Building Connections for Success binder?”

## CHAPTER IV

### RESULTS

All statistical analyses were run using SPSS 18.0 for Windows.

#### **Comparing Mentored Versus Non-mentored Students' Perceptions of Their First Year of College and Knowledge of Campus Resources at Posttest**

To assess differences between students with and without a peer mentor on perceptions of their first year of college, a between subjects analysis of covariance (ANCOVA) was run for each item of the survey, with pretest responses as covariates and posttest responses as outcome variables. While a multivariate analysis of covariance (MANCOVA) could have been used, the article by Huberty and Morris (1989) contends that multiple univariate analyses are helpful for detecting differences on specific items of a scale.

As hypothesized, students with peer mentors reported more positively on their first semester perceptions of college than students without a peer mentor (see Table 1). The students with peer mentors felt significantly more integrated into the CSUN community than non-mentored students. Mentored students were also significantly more likely to feel like an active part of CSUN, as well as feel a strong positive connection to CSUN. Mentored students were significantly more likely than non-mentored students to feel as though they had at least one person they could turn to for emotional support, as well as academic support, compared to non-mentored students. Compared to non-mentored students, mentored students were significantly more likely to agree that the CSUN Career Center could help them clarify their career goals, that it was essential to spend time thinking about what was important to them, and that they knew how to use

their strengths and interests to make both academic and career decisions. Mentored students were not significantly more likely than non-mentored students to agree that they expected to graduate from CSUN in 4-6 years.

Table 1  
*Summary of ANCOVAs Run on Mentored Students' Versus Non-Mentored Students' Posttest Perceptions of CSUN, Controlling for Pretest Scores (n = 304).*

Please respond to the following statements:	Students with Peer Mentor		Students without Peer Mentor		F	df	p value	eta
	M	SE	M	SE				
I feel very integrated into the CSUN community.	4.73	.09	4.43	.09	6.05	1,297	.014	.02
I feel an active part of the CSUN community.	4.50	.09	4.09	.09	9.31	1,297	.002	.03
I feel a strong positive connection to CSUN.	4.90	.08	4.56	.09	7.40	1,292	.007	.03
I have at least one person who I can turn to for emotional support at CSUN.	5.09	.09	4.77	.10	5.58	1,297	.019	.02
I have at least one person who I can turn to for academic support at CSUN.	5.20	.09	4.85	.09	7.24	1,292	.008	.02
I expect to graduate from CSUN in 4-6 years.	5.52	.07	5.49	.08	.05	1,295	.825	.00
The CSUN Career Center can help me clarify my career goals.	5.10	.08	4.85	.09	4.00	1,294	.046	.01
It is essential to spend time thinking about what is important to me and what I like to do.	5.49	.07	5.16	.07	11.02	1,294	.001	.04
I know how to use my strengths and interests to make academic and career decisions.	5.19	.08	4.96	.08	4.04	1,295	.050	.01

1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree

To assess differences in knowledge of campus resources between students with and without a peer mentor, a between subjects ANCOVA was run for each item of the survey, with pretest responses as covariates and posttest responses as outcome variables. As shown in Table 2, students with peer mentors reported feeling significantly more familiar with the Disability Resources and Educational Services, compared to students with no peer mentor. No other significant differences were found.

Table 2

*Summary of ANCOVAs Run on Mentored Students' Versus Non-Mentored Students' Posttest Knowledge of Campus Resources, Controlling for Pretest Scores (n = 304).*

How familiar are you with the following campus resources?	Students with Peer Mentor		Students without Peer Mentor		F	df	p value	eta
	M	SE	M	SE				
Career Center	4.05	.07	3.93	.08	1.29	7	.257	.00
Disability Resources and Educational Services	2.72	.11	2.36	.11	5.33	3	.022*	.01
Writing Center	3.64	.10	3.72	.11	.32	3	.571	.00
Financial Aid Office	3.70	.09	3.63	.10	.30	6	.586	.00
Academic Advisement	4.46	.07	4.25	.08	3.72	4	.055	.01
Klotz Student Health Center	4.30	.07	4.18	.08	1.19	1	.277	.00
Fitness Center	4.39	.08	4.38	.08	.01	6	.940	.00
Matador Involvement Center	3.82	.09	3.73	.09	.56	4	.455	.00
University Counseling Services	3.74	.09	3.49	.10	3.73	5	.054	.01
Associated Students	3.69	.09	3.61	.10	.35	6	.557	.00
University Student Union	4.23	.08	4.19	.08	.10	7	.754	.00
Tutor lab, online tutoring, and/or math homework lab	3.86	.10	3.86	.10	1.10	9	.296	.00
University Library	4.61	.06	4.65	.06	.24	9	.626	.00

1 = not familiar, 2 = little familiar, 3 = somewhat familiar, 4 = familiar, 5 = very familiar

### **Comparing Mentored Students' Pretest to Posttest Perceptions of College and Knowledge of Campus Resources.**

To assess differences between mentored students' pretest and posttest perceptions of their first semester in college, paired samples *t*-tests were run for each survey item. As hypothesized, scores were significantly higher at posttest for all but one item of the scale (see Table 3). At posttest, students felt they were significantly more integrated into, as well as a more active part of, the CSUN community. They also felt a significantly stronger connection to the university from pretest to posttest. Students reported

significantly more that they had at least one person they could turn to for both academic and emotional support at posttest. They agreed significantly more at posttest that it was helpful to have both an assigned faculty mentor, as well as an assigned peer mentor. They agreed significantly more at posttest that the CSUN Career Center could help clarify career goals, that it is essential for them to think about what is important to them and what they like to do, and that they know how to use their strengths and interests to make academic and career decisions, compared to pretest. They did not significantly increase in their expectation that they would graduate in 4 to 6 years.

Table 3  
*Summary of Paired Samples T-Tests Comparing Mentored Students' Pretest to Posttest Scores on Perceptions of their First Semester of College (n =162 )*

Please respond to the following statements:	Students with Peer Mentor		<i>p</i> value	<i>t</i> value	Cohen's <i>d</i>
	Pre	Post			
I feel very integrated to the CSUN community.	4.08	4.72	.000	-5.03	-.56
I feel an active part of the CSUN community.	3.90	4.46	.000	-4.69	-.47
I feel a strong positive connection to CSUN.	4.48	4.87	.001	-3.35	-.35
I have at least one person who I can turn to for emotional support at CSUN.	4.66	5.06	.001	-3.41	-.33
I have at least one person who I can turn to for academic support at CSUN.	4.90	5.19	.015	-2.46	-.26
I expect to graduate from CSUN in 4-6 years.	5.41	5.51	.367	-0.90	-.10
It was very helpful to have an assigned peer mentor.	4.66	5.18	.000	-4.25	-.44
It was very helpful to have an assigned faculty mentor.	4.59	5.06	.000	-3.71	-.38
The CSUN Career Center at can help me clarify my career goals?	4.70	5.08	.000	-3.58	-.38
It is essential to spend time thinking about what is important to me and what I like to do?	5.13	5.48	.001	-3.42	-.38
I know how to use my strengths and interests to make academic and career decisions?	4.61	5.18	.000	-5.30	-.56

1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree

To assess differences between mentored students' pretest and posttest knowledge of campus resources, paired samples *t*-tests were run for each item of the scale. As hypothesized, students reported significantly higher knowledge of all but one campus resource at posttest (see Table 4). Students had significantly increased knowledge of the

Career Center, Disability Resources and Educational Services, the Writing Center, Academic Advisement, the Klotz Student Health Center, the Fitness Center, the Matador Involvement Center, University Counseling Services, Associated Students, University Student Union, Tutoring and homework labs, and the University Library. Students did not report significantly increased knowledge of the Financial Aid Office.

Table 4  
*Summary of Paired Samples T-Tests Comparing Mentored Students' Pretest to Posttest Scores on Knowledge of Campus Resources (n =162)*

How familiar are you with the following campus resources?	Students with Peer Mentor			
	<i>Pre</i>	<i>Post</i>	<i>p value</i>	<i>t value</i>
Career Center	2.61	4.04	.000	-13.14
Disability Resources and Educational Services	1.92	2.71	.000	-6.51
Writing Center	2.10	3.64	.000	-11.89
Financial Aid Office	3.54	3.69	.230	-1.21
Academic Advisement	3.42	4.44	.000	-8.64
Klotz Student Health Center	2.39	4.28	.000	-17.30
Fitness Center	3.68	4.37	.000	-5.79
Matador Involvement Center	2.56	3.80	.000	-10.83
University Counseling Services	2.52	3.73	.000	-10.53
Associated Students	2.79	3.66	.000	-7.48
University Student Union	3.40	4.20	.000	-7.47
Tutor lab, online tutoring, and/or math homework lab	2.94	3.99	.000	-7.98
University Library	3.89	4.60	.000	-6.81

1 = not familiar, 2 = little familiar, 3 = somewhat familiar, 4 = familiar, 5 = very familiar

### Qualitative Analyses

Students' open-ended responses about perceived benefits and suggested improvements for the peer mentor program were quantified by first determining recurring themes across all of the surveys, and then coding each response based on whether or not it corresponded to one or several of the themes that were identified. There were twelve common themes identified for perceived benefits, and eleven themes for suggested improvements. One example of a perceived benefit is as follows: "The peer mentors gave us that extra push to break from that freshman shyness, along with familiarizing us with the campus." This response would have two themes matched to it: "Help with adjustment to college/how to act professionally" and "Learning the CSUN campus and where different buildings are located." If a student answered that he or she did not find the mentor beneficial, this was matched to a theme as well: "Nothing/not very helpful." Similarly, if a student answered that he or she did not think the program needed any improvement, this was assigned a theme: "Nothing / Good as is." The responses were

matched to each theme on a spreadsheet, and then the coding on the spreadsheet was double-checked by a different trained research assistant. Finally, percentages were calculated to determine what percent of respondents mentioned each theme. If a participant did not answer the question (i.e., a blank response), that participant was excluded from the percentage calculation for that question.

As shown in Table 5, the most commonly mentioned benefit was that the peer mentors provided general advice and were helpful all around. The next most mentioned theme was that the peer mentors were friendly, approachable, and available, followed by peer mentors gave emotional support, encouragement, help with personal issues, and motivation to the mentees. Eight additional themes were mentioned (see Table 5). Also, 4.1% of the respondents stated the peer mentors were not helpful or there were no perceived benefits of the peer mentor program.

Table 5  
*Percent of Participants Who Mentioned Each Perceived Benefit (n =171)*

Perceived Benefits	%
General advice/all around helpful/help with everything/answering any questions	26.3
Friendly, approachable, available	25.1
Emotional support/encouragement/motivation/help with personal issues	21.6
Relatable - mentors are students themselves	12.3
Advice about major, future classes/what professors to take	8.2
Information about campus events and services/resources	8.2
Help with adjustment to college/how to act professionally	7.6
Networking/getting involved on campus/new opportunities (internships, etc.)	5.8
Nothing/not very helpful	4.1
Help with studying and homework	3.5
Learning the CSUN campus and where different buildings are located	2.9
Time management/study habits	2.9

The theme that appeared most often for suggested improvements was that the mentor program is good as is and does not need improvement (see Table 6). The next most frequently occurring suggestion is that the mentors could be more involved, be in class more often, and establish more contact outside of class. No additional themes were

mentioned, as shown in Table 6. Also, 5.1% were not sure or did not know any suggestions.

Table 6  
*Percent of Participants Who Mentioned Each Suggested Improvement (n = 157)*

Suggested Improvements	%
Nothing, good as is	35.0
More involvement/more contact outside of class/be in class more often	19.7
More events/assignments/activities	8.9
More informative/more knowledgeable/better advice	7.0
More mentors overall	7.0
More focus on academics/help with classwork	5.1
More one-on-one meetings with students	5.1
Don't know/not sure/N/A	5.1
Mentors can be more sociable/approachable	4.5
Unnecessary to have them/make It optional/less meetings	3.2
Get students involved/ take students to events on campus (sports, etc.)	2.5

### **Frequencies for Ratings of the Mentors**

Frequencies were run on the students' ratings regarding various qualities of their peer mentors (e.g., positive attitude, cared about their academic success, responsiveness). As seen in Table 7, the vast majority of the students surveyed rated their peer mentor as being "High" or "Very High" on each characteristic, while very few rated their mentor as "Low" or "Very Low."

Table 7  
*Frequencies for Ratings of Mentors (n = 162)*

Please rate the peer mentor.	Very				
	Low	Low	Average	High	Very High
Had a positive attitude.	-	.6%	5.1%	22.2%	72.2%
Was respectful.	-	-	3.8%	20.9%	75.3%
Cared about my academic success.	.6%	2.5%	10.8%	15.8%	70.3%
Involved the students.	.6%	1.9%	7.6%	21.5%	68.4%
Was approachable.	-	.6%	4.5%	21.8%	73.1%
Answered questions.	-	1.3%	7.0%	17.7%	74.1%
Was responsive.	-	.6%	5.7%	19.0%	74.7%
Overall rating of the peer mentor.	-	1.3%	3.8%	18.4%	76.6%

1 = very low, 2 = low, 3 = average, 4 = high, 5 = very high

## CHAPTER V

### DISCUSSION

#### **Summary of Findings**

The purpose of this study was to evaluate the Building Connections for Success Peer Mentoring program and measure if it had a positive impact on freshmen college students' first semester experiences. This was to be demonstrated by showing whether (1) mentored students would report higher integration and connection to the university at posttest, compared to non-mentored students; (2) mentored students would report increased familiarity with campus resources at posttest, compared to non-mentored students; (3) mentored students would feel more integrated and connected to the university at posttest, compared to pretest; and (4) mentored students would report increased familiarity with campus resources at posttest, compared to pretest.

Strong evidence was provided for three of the four hypotheses. Specifically, mentored students reported feeling significantly more integrated and connected to the university by the end of their first semester, both compared to non-mentored students, and from pretest to posttest. Mentored students also significantly improved their knowledge of campus resources from pretest to posttest. However, mentored students did not report increased knowledge of campus resources at posttest, compared to non-mentored students. Analyses of qualitative data indicated the students viewed the mentors as supportive, available, and approachable.

#### **Discussion**

As mentioned previously, the students with mentors felt significantly more connected to the university, perceived significantly more support at the university, and

felt significantly more like an active part of the university than students without a mentor. The results of this study are consistent with prior research showing that peer mentorship is beneficial to students' feelings of integration, (Chapman & Pascarella, 1983; Hughes & Fahy, 2009; Tinto, 1997), academic success (Leidenfrost et al., 2011; Salinitri, 2005), and level of social support (Milne, et al., 2007). This is likely because the students with mentors benefitted from the individualized attention and had more opportunities to be involved on campus.

Frequencies run on the survey items provided further evidence for the efficacy of the peer mentoring program. For example, 62% of the mentored students agreed or strongly agreed at posttest that they felt more integrated into the university, while 50% of the non-mentored students agreed or strongly agreed with the same statement. Over 50% of the mentored students strongly agreed or agreed that they felt an active part of the CSUN community, while only 35% of the non-mentored students agreed or strongly agreed to the same statement. When asked to evaluate their peer mentors overall, 95% of the students gave their mentor a "high" or "very high" rating. Also, based on the qualitative responses, the students developed supportive relationships with the peer mentors.

Although university peer mentorship can result in increased familiarization with a college campus and its facilities (Alonso et al., 2010), the results of this study indicated no significant difference between groups on knowledge of university resources. It is likely that the reason no differences were found is because teachers in UNIV 100 teach students about resources, regardless of whether or not the students have a peer mentor (A. Garcia, personal communication, October 4, 2012). Also, since students are on campus for a

semester, they have more opportunity to learn about resources. However, mentored students had significantly greater knowledge of resources at the end of the semester compared to the beginning.

Qualitative data in the form of open-ended questions about what students found beneficial about the program, as well as suggestions for improvement, supported the hypotheses as well. The most commonly cited benefits of the peer mentors were that they provided general advice, as well as some form of emotional support, encouragement, motivation, or help with personal issues. The mentees also frequently described their mentors as being friendly and approachable, as well as relatable since the mentors are also students at the university. These positive attributes are consistent with how peer mentoring has been characterized in the literature (Leidenfrost et al., 2011; Milne et al., 2007).

In regards to suggestions for improvements, most mentees stated that the peer mentor program did not need to be improved and is fine as it is. However, a frequently cited suggestion was that mentors be more involved overall, including more contact outside of class or attending class more often. Mentees also suggested more assignments, activities, and events specific to the peer mentorship program. Other suggestions for improvement were that mentors could be more knowledgeable, informative, or give better advice.

### **Limitations and Research Implications**

This thesis will contribute to the literature on potential benefits of university peer mentoring; however, there are some limitations to the study. For all students contacted to take the survey, the response rate was less than half at pretest and a third at posttest. This

could be due to several reasons. First, the surveys were distributed online to students' email accounts. Students might have either been less inclined to participate online when taking the survey from home, or they could have started the survey and forgot to finish. These issues could have been moderated with a paper-and-pencil survey given during class time. Also, participation was not mandatory in some of the UNIV 100 classes. Some of the instructors, as well as the peer mentors, encouraged but did not require their students to take the surveys.

Next, the surveys were collected over the course of one semester, meaning that data related to retention and graduation rates could not be recorded in the time of the thesis. However, the evaluator and project director for the grant are tracking this data. The institutional data can add to the understanding of the perceived impact of the peer mentoring program.

Another limitation is that the sample was from one university in Southern California, which restricts generalizability of the results. However, the grant is targeting this university, and the results are mostly consistent with studies at other universities in other geographic regions.

### **Implications**

Despite the limitations, certain implications for practice emerge. First, the findings of this evaluation can be used to inform the administrators of the Building Connections for Success program of the relative merits of the peer mentoring program. Given that the program is federally funded, they can convey the effectiveness of the program to stakeholders using valid and accurate data.

Also, the UNIV 100 instructors and the peer mentors can use the study to identify

aspects of the program that are successful, as well as to target areas that need improvement. For instance, although many of the mentees felt that they benefitted from their mentors' support and encouragement, one frequent suggestion was that the mentors could also have been more involved or could have attended class more often. Thus, program coordinators might want to monitor and/or encourage mentors to ensure that they are available and make frequent contact with the mentees.

Finally, the results can help during the preliminary stages of similar programs (Nan, 2003). In other words, when universities are considering developing a peer mentoring program, the program developers can look at the components of this program (as well as other successful programs) when developing and implementing their own programs. This is especially true when designing other university peer mentoring programs that target low college retention and graduation rates. The program workers can reference the success of this and similar programs in helping students feel more connected to the university, which in turn should predict a lower likelihood of dropping out of school (Tinto, 1997).

### **Conclusion**

This study was an evaluation of a university peer mentoring program at a comprehensive university in Southern California which aims to increase retention and graduation rates at the university. The effectiveness of the program was measured through students' feelings of belonging, connectedness, perceived academic and social support, and familiarity with campus resources and facilities. Compared to students without a peer mentor, students assigned a peer mentor reported feeling significantly more integrated into the campus, but did not report significantly greater knowledge of resources.

Mentored students' feelings of connectedness and integration, as well as knowledge of resources, increased significantly from the beginning of the semester to the end of the semester. Results paralleled other studies that found peer mentoring to be beneficial in promoting feelings of integration and perceived supportiveness, which might consequently help students to persist beyond their freshmen year and graduate on time.

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APPENDIX A

MEASURES USED IN THE THESIS

**PRETEST – PEER MENTEES**

**What is your age?** \_\_\_\_\_

**What is your gender?** 1. Female 2. Male

**What is your classification?** 1. Freshman 2. Sophomore 3. Junior 4. Senior

**In terms of an ethnicity/race, I am:**

1. African American/Black 2. Asian 3. Caucasian/White 4. Hispanic/Latino 5. Native American  
6. Middle Eastern or Armenian 7. Two or more races

**Do either of your parents have a college degree?** 1. Yes 2. No

**What country were you born in?** \* dropdown box

**What country was your mother born in?** \* dropdown box

**What country was your father born in?** \* dropdown box

**What is your major?** \* dropdown box

<b>Please respond to the following statements:</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Somewhat Disagree</b>	<b>Somewhat Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>
I feel very integrated into the CSUN community.	1	2	3	4	5	6
I feel an active part of the CSUN community.	1	2	3	4	5	6
I feel a strong positive connection to CSUN.						
I have at least one person who I can turn to for emotional support at CSUN.	1	2	3	4	5	6
I have at least one person who I can turn to for academic support at CSUN.	1	2	3	4	5	6
I expect to graduate from CSUN in 4-6 years.	1	2	3	4	5	6
It would be very helpful to have an assigned peer mentor.	1	2	3	4	5	6
It would be very helpful to have an assigned faculty mentor.	1	2	3	4	5	6
The CSUN Career Center can help me clarify my career goals?	1	2	3	4	5	6
It is essential to spend time thinking about what is important to me and what I like to do?	1	2	3	4	5	6
I know how to use my strengths and interests to make academic and career decisions?	1	2	3	4	5	6

<b>How familiar are you with the following campus resources?</b>	<b>Not Familiar</b>	<b>Little familiar</b>	<b>Somewhat familiar</b>	<b>Familiar</b>	<b>Very familiar</b>
Career Center	1	2	3	4	5
Disability Resources and Educational Services	1	2	3	4	5
Writing Center	1	2	3	4	5
Financial Aid Office	1	2	3	4	5
Academic Advisement	1	2	3	4	5
Klotz Student Health Center	1	2	3	4	5
Fitness Center	1	2	3	4	5
Matador Involvement Center	1	2	3	4	5
University Counseling Services	1	2	3	4	5
Associated Students	1	2	3	4	5
University Student Union	1	2	3	4	5
Tutor lab, online tutoring, and/or math homework lab	1	2	3	4	5

## POSTTEST – PEER MENTEES

What is your age? \_\_\_\_\_

What is your gender? 1. Female 2. Male

What is your classification? 1. Freshman 2. Sophomore 3. Junior 4. Senior

In terms of an ethnicity/race, I am:

1. African American/Black 2. Asian 3. Caucasian/White 4. Hispanic/Latino 5. Native American  
6. Middle Eastern or Armenian 7. Two or more races

Do either of your parents have a college degree? 1. Yes 2. No

What country were you born in? \* dropdown box

What country was your mother born in? \* dropdown box

What country was your father born in? \* dropdown box

What is your major? \* dropdown box

Please respond to the following statements:	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
I feel very integrated to the CSUN community.	1	2	3	4	5	6
I feel an active part of the CSUN community.	1	2	3	4	5	6
I feel a strong positive connection to CSUN.						
I have at least one person who I can turn to for emotional support at CSUN.	1	2	3	4	5	6
I have at least one person who I can turn to for academic support at CSUN.	1	2	3	4	5	6
I expect to graduate from CSUN in 4-6 years.	1	2	3	4	5	6
It was very helpful to have an assigned peer mentor.	1	2	3	4	5	6
It was very helpful to have an assigned faculty mentor.	1	2	3	4	5	6
The CSUN Career Center can help me clarify my career goals?	1	2	3	4	5	6
It is essential to spend time thinking about what is important to me and what I like to do?	1	2	3	4	5	6
I know how to use my strengths and interests to make academic and career decisions?	1	2	3	4	5	6

How familiar are you with the following campus resources?	Not Familiar	Little familiar	Somewhat familiar	Familiar	Very familiar
Career Center	1	2	3	4	5
Disability Resources and Educational Services	1	2	3	4	5
Writing Center	1	2	3	4	5
Financial Aid Office	1	2	3	4	5
Academic Advisement	1	2	3	4	5
Klotz Student Health Center	1	2	3	4	5
Fitness Center	1	2	3	4	5
Matador Involvement Center	1	2	3	4	5
University Counseling Services	1	2	3	4	5
Associated Students	1	2	3	4	5
University Student Union	1	2	3	4	5
Tutor lab, online tutoring, and/or math homework lab	1	2	3	4	5

**Did you have an assigned Peer Mentor in your UNIV 100 class?** 1. Yes 2. No

Please rate your agreement with each statement about your PEER MENTOR	Strongly Disagree	Disagree	Agree	Strongly Agree
Provided helpful resources.	1	2	3	4
Helped me learn the course material.	1	2	3	4
Helped me make a better grade.	1	2	3	4
Was available outside of the class through email, phone, in person, etc.	1	2	3	4
Was supportive.	1	2	3	4
Makes me feel that people at CSUN care whether I graduate or not.	1	2	3	4
Helped me understand the requirements of my major.	1	2	3	4
Informed me about CSUN events (e.g., Big Show, plays, sport events, carnivals)	1	2	3	4
Made me feel more connected to CSUN.	1	2	3	4

Please rate the PEER MENTOR	Very Low	Low	Average	High	Very High
Had a positive attitude toward students.	1	2	3	4	5
Was respectful towards students.	1	2	3	4	5
Cared about my academic success.	1	2	3	4	5
Involved the students.	1	2	3	4	5
Was approachable.	1	2	3	4	5
Answered questions.	1	2	3	4	5
Was responsive.	1	2	3	4	5
Overall rating of the peer mentor.	1	2	3	4	5

How frequently have you used the following	Not At All	Once	A Few Times	Frequently
<i>Building Connections for Success</i> binder	1	2	3	4
<i>My Career Plan</i> booklet	1	2	3	4

**How do you see yourself using the Building Connections for Success binder?**

**Who was your peer mentor?**

**What did you find was beneficial about the peer mentors?**

**How could the peer mentors be improved for next year?**