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## A MIXED-METHOD STUDY ON THE MENTOR EXPERIENCES AT A PUBLIC 4-YEAR UNIVERSITY

Avisinia Rodriguez

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A MIXED-METHOD STUDY ON THE MENTOR EXPERIENCES AT A PUBLIC  
4-YEAR UNIVERSITY

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A Dissertation  
Presented to the  
Faculty of  
California State University,  
San Bernardino

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In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Education  
in  
Educational Leadership

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by  
Avisinia Rodriguez

August 2021

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August 2021

Approved by:

Dr. Sharon Brown-Welty, Chair

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## ABSTRACT

Traditionally, students sign up for peer mentoring programs to receive services and resources as mentees in order to be successful in college. Studies have shown that mentoring relationships benefit mentees (Salinitri, 2005; Morales, 2009) while others (Colvin and Ashman, 2010; Gannon and Maher, 2012; Good et al. 2000) examined how mentors received training to support mentees. The studies exploring the experiences of mentors is not as robust, this study tries to explain the self-reflection unexpected benefits of mentors who participate in peer mentoring programs.

This mixed-method study examined the experiences first-generation peer mentors have at a public four-year university. Through in-depth interviews as well as a retrospective pretest and posttest set of questions during the interview were used to examine their perceived persistence, self-efficacy, and contribution to social capital of students who participated as peer mentors.

The findings include an awareness of the benefits of being a mentor. For example, mentors gained better study skills while they learned about these skills for their mentees. Personally, mentors became more confident in themselves and changed their mindset when it came to their own educational abilities therefore enhancing their self-efficacy. Mentors did not explain how their experiences are building social capital for their communities, instead, they reflected on what personal benefits they gained like receiving application fee waivers and extra

skills for their success. The retrospective pretest and posttest set of questions did show a significant increase in their self-efficacy and social capital.

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## DEDICATION

This degree is dedicated to all the students I have worked with thus far in my journey, to those I continue to work with and, finally, to those whom I will work with in the future.

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## CHAPTER ONE

### INTRODUCTION

The rapid growth of college graduates compared to students admitted into four- year universities in California differ. In California, the percentage of students graduating is lower than the number of students who get admitted each year at the 23 California State Universities (CSU). This low graduation rate is especially true in the Inland Empire, which consists of two counties in Southern California, Riverside and San Bernardino. The college degree completion rate for this area is 20.3% in San Bernardino County and 21.8% Riverside County compared to California at 33.3% and compared to the United States at 31.5% (US Census, 2019). As a result of these low graduation rates, many universities are exploring ways to increase persistence and graduation rates. Consequently, programs focused on mentoring have been on the rise in order to assist first generation college students maneuver through higher education.

Peer mentoring programs implemented at universities are important because the perceived impact of these programs go beyond students graduating from college (Gannon & Maher, 2012; Morales, 2009; Torres & Hernandez, 2009). Often the benefits to the mentors are not documented, which is unfortunate because mentoring relationships may help both the mentee and mentors (Colvin & Ashman, 2010; Gannon & Maher, 2012; Salinitri, 2005) alike and more programs might be made available if the success rates of these

programs were demonstrated. Since mentors tend to be further along in their undergraduate studies, they most likely will be graduating from college and out in the workforce before the mentees. Graduating on time, usually meaning within four years, can be a substantial accomplishment for many students and mentoring first-generation students can have an impact on graduation rates for mentors (Hu & Ma, 2010, Morales, 2009). It is important to understand how mentoring programs impact graduation rates and educational administrators need to know what best practices should be built into their mentoring programs for students who serve as mentors to ensure student success (Kuh, 2009).

Part of being a college graduate means becoming a contributing member of society. As a college graduate, what do alumni bring to society and what impact did participating in mentoring programs play in building social capital for others? Ideally, these graduates are critical thinkers and problem solvers who will build their community. What perceived impact, if any, do mentoring programs play in building their self-efficacy? Does participating as mentors play any role in their persistence through college? Further, what other benefits do students who participate as mentors realize being a mentor play on these students?

## Background

Students who sign up to be mentees in a mentoring program have often credited their mentor as someone who helped them succeed (Morales, 2009). The role of the mentor in a mentee's life is to support success (Colvin & Ashman, 2010, Salinitri, 2005, Gannon & Maher, 2012), encourage completion, (Wang,

2012, Hu & Ma, 2010, Morales 2009), and to build a social network (Gannon & Maher, 2012). These perceived impacts are positive influences mentors have on their mentees.

The mentoring programs at California State University Southern California (CSUSC) vary in their missions. The overall demographics of the university are: 61% female, 86% are full time, 64% are Hispanic, and over 80% are first generation. Currently the CSU system is implementing a graduation initiative in hopes of having a 30% four-year graduation rate by 2025. With that goal set, retention programs like mentoring have taken center stage. Currently, these programs are designed to assist first-year students as they transition into the university. Kuh et al., (2008) focused on the importance of first-year experiences of students to persist and continue their education and noted it was important to further study these programs. Recently, a second-year mentoring program started at CSUSC, where students are paired up with upper classmen to learn better study habits and create networks within the university. Another mentoring program at CSUSC connects students with university alumni by pairing students who are professionals in their fields. These programs are important to participating students and the impact of these programs should be examined.

### Purpose of the Study

This mixed-methods study is designed to examine the experiences of first-generation peer mentors who mentor college students at a four-year public university in Southern California. The purpose of the study is to explore the self-

perception peer mentors have about how they were impacted in the area of persistence to obtain their degree, their self-efficacy, and the ways in which they built social capital for others. The participants in this study explored be upper division students (sophomores, juniors, and seniors) and alumni who have been or are currently serving as peer mentors.

### Need of the Study

Universities are constantly searching for how they can increase retention when in fact, universities should view retention from the point of view of the student (Tinto, 2017). From this perspective, retention is about persistence, graduating from college and being a contributor to their society. There is a paucity of knowledge regarding the experiences of mentors who participate in a university's peer mentoring programs and the impact these programs have on them. This study proposes to document the experiences of the mentor who participates in peer mentoring programs; explore the possible best practices for training and retaining peer mentors in their programs; give a voice to the lived experience of the mentor; and study how mentors build social capital in first generation communities.

### Overview of Methodology

Research questions:

This study explored and carried out through in-depth interviews with students who participated as mentors in university mentoring programs. Registrar statistical information regarding the mentor's grades and years at the university

will be considered in order to triangulate the qualitative interview data and establish their persistence, self-efficacy, and social capital.

The research questions that frame this study are:

1. What are the benefits of participating as a peer mentor at a university have on the peer mentor's perceived persistence in their college education and are they on track to graduate on time?
2. In what ways does participating in a peer mentoring program as a peer mentor have on that individual's perceived self-efficacy?
3. In what ways does participating in a university's peer mentoring program as a peer mentor assist in their perception of building social capital for their community?

### Theoretical Framework

The theoretical framework for this study further explains the connection between mentors and their success in college and beyond. Building on social capital and the self-efficacy of mentors appears to create a sense of accomplishment and success for students who participate as mentors. The studies on self-efficacy, persistence, and social capital are scarce in the research about mentors, therefore this study will help build a bridge to clarify the relationship between the success of mentees and the successes of mentors.

## Persistence

Persistence is viewed as skills students should have to get through college and graduate on time (Hu & Ma, 2010; Tinto, 2017; Kuh, 2009). The persistence of mentors is not often studied, the focus tends to be on the mentees (Salinitri, 2005; Good et al. 2000). The persistence of students varies, for example, Hu and Ma (2010) stated that students who are first in their families to go to college have a challenging time navigating the system and meeting expectations of higher education because they lack resources of other people who could guide them.

Tinto (2017) pointed out that universities should do more to improve student persistence by putting into place resources that help students before they know they need help. In addition, Tinto proposed integrating some sort of engagement or student involvement in college campus experience. Student involvement facilitates student's persistence, according to Astin (1999). Involvement, according to Astin, is important for student achievement and persistence as well as for their educational attainment. Furthermore, Kuh (2009) explained that student engagement has effects on grades and as well as the persistence of students. Moreover, when students are engaged and university related activities, their odds of completing their educational objectives increase because they acquire new skills and competencies needed for employment, and monetary advantages associated with having a baccalaureate degree (Kuh, 2009).

Persistence falls on the student too; the students must want to persist in order to put effort into their studies (Tinto, 2017). Astin (1999) stated that being involved in activities outside the classroom, extracurricular activities, is what can help a student persist and graduate from college. Students who do not persist often lack the self- efficacy needed to be successful (Tinto, 2017).

### Self-Efficacy

When a student believes they can complete a task, that is their own self- efficacy or drive at work (Tinto, 2017; Wang, 2012). Bandura (1977) broke down efficacy expectations into four sources; performance accomplishments, which is based on personal mastery; vicarious experience, which is live modeling or learned behaviors; verbal persuasion, which is when people are encouraged to keep doing work; and finally, emotional arousal, which is how individuals deal with stress and anxiety. Because of the transfer of information and actions, self- efficacy is not inherited, but instead it is learned behaviors (Tinto, 2017).

Often, mentors are perceived as role models (Pike & Kuh, 2005; Good et al. 2000; Wang, 2012), which can contribute to the self-efficacy of the mentor. Through these relationships, the positive outcome of contributing to the skills of the mentee helps the mentor feel more confident about their own skills (Bandura, 1977). Moreover, these types of beliefs shape the career aspirations of the mentors (Bandura et al. 1996). Therefore, self-efficacy functions as a way for mentors to feel engaged and involved in their college experience by working with others who need their support to be successful.

Finally, it is important to understand that self-efficacy is not a fixed mindset and it can be influenced by the experiences a student faces while in college (Tinto, 2017) as well as influenced by family, socioeconomic status as well as peers (Bandura et al. 1996). Self-efficacy is the foundation on which student success is built (Tinto, 2017) as well as a building block towards persistence (Hu & Ma, 2010).

### Social Capital

Social capital pertains to how people interact within their social circles and social connections to access information and resources and has an impact on how well students navigate the college experience. Capital can present itself in three guises, economic, cultural, and social capital (Bourdieu 1986; Shiera et al., 2018). Researchers like Morales (2009), Morales et al. (2016), and Hezelett and Gibson (2007) pointed to the ties mentoring has on favorable career and educational outcomes for individuals. Bourdieu posits that capital takes time to accumulate and the potential to produce profits is possible in time, therefore there is no timeline to build capital.

There is also value in information coming from social groups and where an individual can expand their social circle. Most of the studies regarding mentoring and social capital focused on the gain of the mentee or protégé. Hezelett and Gibson (2007) focused on this theme in their research and they identify various ways social capital can increase within the lives of the mentees. Most peer mentoring and mentee relationships end when there are career moves or

advancements for the mentee. Coleman (1988) explained that the social structure is what facilitates the actions of each [mentor] by the relationships within the group of people they surround themselves with.

Regarding the benefits for mentors, Hezelett and Gibson (2007) also found that serving as a mentor can lead to “enhanced career satisfaction, improved performance, accelerated promotion rates, higher salaries, and the satisfaction of helping others, greater visibility in one's organization, learning, and recognition for developing others.” (p. 395-396).

Ultimately, social capital is the culmination of resources that are related to a network of relationships (Bourdieu, 2001). The way mentors have access to these resources and how they build social capital for their community depends on the experiences they have with mentees within peer mentoring programs.

#### Definitions

*First generation college students* - Students whose parents have not attended college and/or have not earned a college degree (Engle, 2007)

*Mentoring* - a formalized relationship whereby the mentor facilitates the success of the mentee by teaching and modeling effective behaviors (Morales et al., 2016).

*Persistence* – a quality that allows someone to continue in pursuit of a goal even when challenges arise (Tinto, 2017); in this case making socioeconomic progress and moving to the next level.

*Self-efficacy* – the person’s belief in their ability to succeed in a particular task (Bandura, 1977).

*Social Capital* - an aspect of social structures and how they facilitate certain actions within the structure (Coleman, 1988)

*Inland Empire Geographic Terminology* - The Inland Empire is in Southern California directly adjacent to the East of Los Angeles and Orange Counties consisting of two counties: San Bernardino and Riverside, (Heiting et al., 2015).

*Coachella Valley* – Colorado Desert area in Southern California consisting of 9 major cities, the total population of the area in 2019 was 388,000 residents. (CVEP, 2019)

*San Bernardino* – largest county in the state of California covering over 20,000 square miles, consisting of 24 cities\*\* and more than 2.1 million people. (US Census, 2019)

### Limitations

One of the limitations of this study is the uniqueness of the Inland Empire. The Riverside and San Bernardino counties compose over 27,000 square miles, making them the largest counties that service CSUSC. This university also has the second highest enrollment of African American and Hispanic students as well as 70% of those who graduate are first in their families to do so. The second limitation was the COVID-19 outbreak and not having access to students face-to-face to interview them one-on-one. Therefore, all interviews will be via zoom video conferencing.

## CHAPTER TWO

### LITERATURE REVIEW

Peer mentoring programs are typically designed to assist students' transition to post-secondary education. Some programs, like the program explored in the study conducted by Morales (2009), target first generation male college students. Others, like the study conducted by Torres and Hernandez (2009), explore Latino college students' experiences. While others, like the Gannon and Maher (2010), partner alumni with professionals in the field. These studies and other research show that students receive messages about college success better from their peers (Wang, 2012).

One major benefit of having these peer mentoring programs is that they increase the academic development and success of students, meaning increased grade point averages (Salinitri, 2005; Good et al. 2000), as well as academic retention and the persistence of mentors (Hu & Ma, 2010, Morales, 2009). The other benefit of peer mentoring programs is the personal growth of the mentee and the mentor (Salinitri, 2005; Good et al. 2000).

#### Mentor/Mentee Relationships

Salinitri (2005) created and studied a two-year mentoring program for low-achieving students at the University of Windsor. The program was designed to enhance the first-year experience of students as well as retain students via mentoring and mentee relationships. The program participants were teacher

candidates as mentors of first-year students as mentees. First-year students who started the university were encouraged to enroll in a University 101 class as an introduction to processes and procedures at the university. The course was recommended for students who were undeclared, students who did not get admitted to their first major of choice, or as an extra credit option.

The purpose of the Salinitri study was to explore the impact of mentoring on first-year students. The questions that guided this research were: 1. what are the differences in retention rates, cumulative GPAs, or number of courses failed in a year between students who participated in a mentoring program and comparable students who did not participate in a mentoring program? 2. Are mentored students satisfied with the outcomes of the program?

The researcher collected exiting high school data for the students who participated in the program. Student information from the university was used to randomly select participants into the experimental group (mentees) and the control group (most students taking the class). The researcher used a database to compare the following: course each student failed in both semesters, end of semester grade point average (GPA), and their academic status. The experimental group was given the mentor assessment survey (Cohen, 1998) to provide an analysis of the program from their point of view.

The study consisted of 128 participants: 56 incoming freshmen in the mentored group, and 72 in the controlled non-mentored group. During year one, there were 34 mentees and during year two there were 22 who were mentored.

In the control group, 53 mentees during year one and 19 in year two. All mentees were mentored by 50 teacher candidates. The mentees in the experimental group were incoming first year students with averages measuring less than 70%, for ethical reasons, the researcher allowed students above that average to participate but did not include them in the analysis. Non-mentored participants in the control group consisted of incoming first year students who had matching grades and student information as the students who were mentored; all participants remained anonymous. These types of peer mentoring programs usually pair an upperclassman with a freshman, or lower classman as was done in the Salinitri (2005) study where the experimental group of freshmen was mentored by teacher candidates.

There were three main benefits that emerged from the research; the peer mentors were able to support mentees, the peer mentors were able to apply mentoring concepts to their own life, and participants were able to connect with each other. One risk found by the study of a peer-mentoring program was the inability at times for students to maintain relationships because mentees and peer mentors had other commitments related to their individual educational pursuits. In addition, the mentors had to be able to put themselves in a vulnerable position by putting themselves “out there” risking rejections as well as then letting the mentees go at the end of the mentoring relationship (Colvin & Ashman, 2010).

The purpose of the Gannon and Maher (2012) study was to explore the value of having alumni and employers involved in mentoring a hospitality and tourism school in a United Kingdom university. This study explored the contribution of the Alumni Mentoring Program to students, faculty and professionals in the hospitality and tourism industry. The objectives of this mentoring program were to:

1. Provide opportunities for alumni (and other industry contacts) to engage with the work of the school and build stronger relationships,
2. Enhance student employability,
3. Facilitate smoother higher education to work transitions and improved reflective learning,
4. Provide realistic expectations into the challenges and opportunities for building successful careers; and
5. Provide networking opportunities for students and participating alumni (pp. 444 - 445).

Fifty-five potential mentors were identified by the Alumni Society and the Faculty and Careers and Work Experience offices, but only 44 participated. Only senior hospitality and tourism professionals were included to be mentors and to take part in a matching event to set up protégé relationships. Mentors were then led through workshops where topics included; active listening, questioning and providing supportive feedback. Mentees attended a three-hour workshop covering topics such as; the benefits of mentoring, purpose of the program, and

other helpful tips. In order to connect mentors with mentees, they were each told to complete questionnaires about their careers and personal interests. Mentees were given the opportunity to review mentors and were told to pick their top five in order to better pair mentors with them. At a matching event, mentors met with mentees where they networked and had icebreaker exercises so they could get to know each other better.

Mentors and mentees had to meet monthly and record their interactions. They also had forms where they recorded what the interaction entailed, focusing on career aspirations and job shadowing. Some mentors and mentees created a newsletter to share with the group about best practices.

The findings of the study indicated benefits and challenges of the mentors and mentees varied. One of the challenges the mentors had was connecting with mentees because it was up to the mentees to reach out to the mentors and they did not always reach out. A benefit the mentees found was that having a mentor was crucial to their success in the industry. A challenge the mentees encountered was the lack of formal events/meetings with their mentor (see Table 1).

Table 1. Challenged and Benefits Indicated by Mentors/Mentees

Challenges and Benefits Indicated by Mentors/Mentees			
Mentors		Mentees	
Challenges	Benefits	Challenges	Benefits
Connecting with mentees	Mentees who were well rounded	No choice in the matter and didn't really understand the point	Great networking and contacts
Apply greater pressure to mentees to really use their respective mentors	Develops social and networking skills	Need More Instructions of What to Discuss and Cover When Meeting with Mentors	Ability to Call on Them for Advice Any Time Has Been Invaluable and Reassuring
More recognition of mentoring at basic stage so that students are better briefed to make the most of it	Develops closer links between industry and education	Need More Formal Events/Meetings So We Can Get Together with Our Mentors	Received Great Advice and Knowledge about the Industry

### Personal Growth

A peer mentor and mentee relationship provide an exchange of benefits including that the mentors are more likely to remain active and interested in their program because they have formed a relationship they value (Good et al., 2000). In a study conducted by Good et al. (2000), the personal growth of participating peer mentors was examined through reviewing the journal excerpts of peer mentors during their first quarter at a minority engineering program at a large university. The researchers reviewed journals and grade point averages (GPA) of the mentors, which were collected for the entire year. Various comments

regarding personal and academic development were embedded in the responses from the peer mentors. The researchers completed a content analysis with the data from the journals where they coded comments on academic growth and on interpersonal growth.

The methods for this study included networking with mentees where mentors acted as tutors in an interactive learning laboratory focusing on math and science skills. The mentors also met on a weekly basis with their mentees to advise them in problem solving and by suggesting different ways of analyzing problems related to their coursework. The mentors also shared their freshmen year experiences and challenges with the mentees. Finally, they shared meals; social events like movies, bowling or study sessions at the homes of the mentees – whatever the mentee wanted.

The mentors received a two-hour training session at the start of the quarter where they learned about their responsibilities as well as program procedures. The training also included scenarios where the peer mentor's role-played. During the quarter long study, there were ongoing evaluations and trainings where the program coordinator was always onsite. The program coordinator also met with mentors weekly to get updates on how their mentees were doing. Each week, mentors received a program evaluation prompt, which included questions on program organizational development, student development, and personal development. These entries were only read by the program coordinator in order to encourage honesty and were never made public.

Good et al. (2010) found by having study sessions and reviews with the mentees, the peer mentors realized that they were acting as role models to the freshmen students, so they wanted to make sure they were modeling the most effective study techniques. In a similar study of peer mentor programs, participating mentors also had to document sessions in a journal as well as assist mentees in enhancing their learning while motivating them to set goals (Salinitri, 2005). Mentors enrolled in a class for credit that examined practices and theory in mentoring; from there they used the mentees as their field experience of the class. Interacting and mentoring the mentees was part of their practicum class, where these future teachers were able to apply theories into practice. Salinitri (2005) found that while mentors gained field experience and mentees received guidance and awareness of resources; the mentees were able to assess the mentors' skills after each interaction, which provided opportunities for mentor's personal growth.

In order to evaluate the effectiveness of the mentoring program, the researcher had to compare the experimental group (of mentees) to three control groups. The GPA of the mentees as well as their academic status were evaluated for this study. The mentor effectiveness was measured by a survey created by the researcher and it contained 28 Likert scale statements (Salinitri, 2005). Similarly, Good et al. (2000) found that mentees assessments by mentors had an impact on the personal growth of mentors

### Leadership skills

The second gain from the Good et al. (2000) study was that 90% of the peer mentors developed their leadership skills such as communication, confidence, and identity. Eighty-nine percent of the mentors reported that being part of the program helped alleviate the feeling of isolation for them by providing a social interaction with students who have a common career goal as well as cultural backgrounds. Having to be in constant contact with the mentees also helped the peer mentors develop their communication skills. Further, their leadership skills also improved evidenced by their abilities to better balance their responsibilities and to feel more confident about their own leadership abilities. Finally, 21% reported a sense of self-satisfaction that came from assisting and mentoring mentees (Good et al. 2000).

### Self-efficacy

In a study conducted by Wang (2012), peer mentors were found to have alleviated the stress from mentees by encouraging them to do better and by showing them how to overcome stressors. The study included thirty first-generation college (FGC) students who took part in semi-structured interviews about memorable experiences with college and family with their on-campus mentors. The research questions guiding this study were:

1. What memorable message do FGC students receive from on-campus mentors about the role a college education should play in their lives?

2. What memorable messages do FGC students receive from on-campus mentors about the role family should play in their lives?

The study was framed using the interpretive paradigm (Corbin & Strass, 2008) in order to get the inner experience of participants to determine how meanings are formed; or by viewing their experience through the eyes of the participants.

Wang (2012) chose 30 students who were 19 years of age or older and were FGS students, which according to the US department of Education, are students whose neither parent have completed a bachelor's degree. During the interviews, these students were asked to describe and explain their mentor's memorable messages in their own words.

The interviews lasted between 30 to 60 minutes; the average age of the participants was 22 ranging from 19-24. There were 20 females, 10 males, 12 freshmen, 10 sophomores, 5 juniors, and 3 seniors who participated. The demographics breakdown was: 20 Caucasian, 4 Asian, 4 Hispanic and 2 biracial participants.

The five memorable messages emerging from the mentees relates to self-efficacy about college that emerged from the interviews were: 1) pursuing academic success; 2) valuing schools; 3) increasing future potential; 4) making decisions; and 5) support and encouragement. The college memorable messages to mentees included finding study resources to pass a test and finding a balance between social life and school life. By creating a research project with

their mentor, a mentee was able to get excited about continuing their education into a Ph.D. program.

In another study, mentors also played a part in giving a voice to mentees who needed support and encouragement during their studies (Hu & Ma, 2010). The purpose of the Hu and Ma (2010) study was two-fold; first to examine how assigning mentors could help students engage in various aspects of student and institutional characteristics. Second, to further examine if mentoring impacts the Washington State Achievers (WSA) program as it relates to persistence in college. The three guiding questions were: 1. how does the assignment of a college mentor vary based on race/ethnicity, gender, institutional type, and academic preparation in high school? 2. How does student engagement in various mentoring aspects vary based on race/ethnicity, gender, institutional type, and/or academic preparation in high school? 3. To what extent are having an assigned college mentor and engagement in various mentoring aspects of the program related to student persistence in college?

The data used for this study was from the third cohort of WSA program participants. These students were first surveyed in high school in 2005 and then again in 2007 (their second year of college). The persistence rate from high school to year two in college was, 83.8%. A total of 452 WSA recipients participated in this study. Within the group, there were 18.5% African American students, 19.3% Asian Americans, 12.2% Hispanics, 39.1% Whites, and 10.1%

other. About 62.1% of the participants were female and 73.7% of all WSA recipients had an assigned college mentor.

The study of the mentoring aspects of the WSA program included: 1) a number of meetings with mentor during the academic year; 2) the extent to which the WSA recipients turned to mentors for support and encouragement; 3) overall experiences with mentoring; 4) and, whether or not the student had a mentor.

This study found that Hispanic students and those students categorized as “other” were more likely than White students to ask for support and encouragement from their mentors. In addition, they found that students who had at least one parent with a baccalaureate degree were more likely to meet with their mentors but at the same time, first generation college students were less likely to be involved in mentoring programs because they lacked confidence in meeting with mentors. Ultimately, the findings confirmed the positive role of having a mentor and increasing persistence among the WSA students.

### Sense of belonging

The connecting link or sense of belonging theme emerged through peer mentors helping mentees inside and outside the classroom through getting involved in campus activities and making the mentees feel more comfortable on campus as well as assisting them in being aware of the resources available to them (Colvin & Ashman, 2010).

In addition, the Colvin and Ashman study discovered the trusted friend theme. It was found that the mentor as a trusted friend was important because

mentees knew they had someone (mentor) on their side to talk through life situations. The Pike and Kuh (2005) study noted that first generation students are often less engaged because they do not know about the importance of engagement outside the classroom. First generation college students, “have less tacit knowledge of and fewer experiences with college campuses and related activities, behaviors, and role models” (pg. 290).

### Mentor Roles

Colvin and Ashman (2010) conducted a study that explored the role of peer mentors, peer mentor / mentee relationships, and the perceived experience of mentoring. The study included participants of a mentoring program at a large public university in the western United States. Students who were interested in taking part of the mentoring program had to enroll in three mentor leadership classes. During the first class, they learned theory related to mentoring as well as communication skills, and learning styles. The second class was a practical lab where mentors applied these new skills with new students. The third class was a practicum class.

Each mentor was paired with a faculty member and together they took part in the first-year experience class with new first-year students. Mentors and faculty met on a weekly basis to discuss training and to set goals for the program. More than 400 students served as mentors in this program.

The research questions for the Colvin and Ashman (2010) study were:

1. How do peer mentors, instructors and students understand the peer mentor role?
2. What types of power and resistance occur (if any) in these peer mentor relationships?
3. What is the response of a peer mentors, students, and instructors to the experience of mentoring?

Data was collected for one year, starting spring 2008 and ending spring of 2009. Data collected included interviews of returning and new mentors, instructors, and student mentees. Data triangulation was used by reviewing weekly journals, conducting observations and conducting interviews.

Researchers kept detailed field notes when they attended activities class meetings and had formal and informal conversations with the mentors. Additional data was gathered through interviews with the mentors, which lasted about 15 to 20 minutes with a total of 12 mentor interviews being conducted for the study.

The data was coded from 40 interview transcripts from mentors, mentees and instructors. As the data was being coded, themes became apparent and phrases such as "I love helping people" became redundant. The primary themes included; definitions of roles, risks and benefits, and overall impression of the program. There were 96 comments about the roles and implications for mentors made by the students, mentors and faculty. Specifically, there were five roles that were identified: connecting link, peer leader, learning coach, student advocate and trusted friend.

### Suppliers of Information and Approvers

In a study conducted by Morales (2009), he found that informal mentoring relationships for male, first generation, Dominican American students to be valuable in building social capital and increasing retention. The question that guided his research was, “what are the common themes of mentoring relationships and how, if at all, are the relations effective in facilitating the participants’ educational progress/standing?” (pg. 389) His interest in the topic came from the lack of research on the nature of organic mentoring relationships and the efficiency of this type of mentoring.

Males were the primary focus of this study because of the disparity between males and females in their college enrollment. Participants were recruited from a university located in northern New Jersey, Urban University. Emails were sent to members of university clubs and organizations and classroom recruitment occurred as well. The researcher was looking for students who; identified as Dominican or Dominican American, had at least 60 college credits, were first generation, had identified a college or high school mentor, and had at least a 2.75 grade point average.

There were 17 students who met the criteria and completed the participant identification form, but only 15 had the availability to be part of the study. The participants ranged in age from 18-28 and lived in New Jersey; ten were born in the United States and five in the Dominican Republic. Each student was given a

pseudonym and the class breakdown was as follows: two freshmen, four sophomores, eight juniors, and one senior.

The mentors were identified by the students as eight university professors, five university administrators in student affairs, admissions professionals, and two high school teachers. The demographics of the mentors were: 73% male, 46% White, 40% Hispanic, and 13% African American.

The researcher conducted 90-minute semi structured interviews of the participants, which happened at least twice. During each interview, the researcher took notes in order to capture nonverbal cues and for documenting ideas and connections. The data was coded twice, first for broad themes and information then for more specific and detailed insight as to the nature of the mentoring relationship. The relationship major themes that emerged were: “mentors as suppliers of inside information” and “mentors as approvers”.

According to the findings of the Morales (2009) study, an important trait of mentors is being resourceful and sharing information with their mentee. In the Morales study, 86% of the participants stated that their mentors provided academic and professional knowledge. Information about formatting research papers as well as effective note taking were two samples of how mentors supplied information to mentees. Many times, the information was basic academic knowledge that other students might have received while in high school through other social capital venues.

## Learning Coaches / Peer Leaders

The literature reviewed noted that by having study sessions and reviews with the mentees, the peer mentors realized that they were acting as learning coaches to their mentees, so they wanted to make sure they were modeling the most effective study techniques. Consequently, this desire to be effective role models for them had had an impact on the mentor's grades and retention even though it was intended for the mentees (Good et al. 2000).

According to Colvin and Ashman (2010), a study previously discussed, the theme peer leader emerged and referred to the qualities of peer mentors motivating and guiding their mentees through the system of higher education. Colvin and Ashman found in their study that mentors as learning coaches, or peer leaders, helped mentees identify their strengths and styles of learning so they would be able to achieve their full potential.

The Colvin and Ashman study also found that peer mentors were student advocates where these mentors became the liaison between instructor and mentees. This advocacy was beneficial to mentees and instructors because the mentor became the middle person for both parties.

## Academic Success

Having a mentor/advisor present during a student's educational experience can lead to higher levels of academic success for students, including from being engaged with faculty to knowledge and behaviors that encouraged success (Torres & Hernandez, 2009; Salinitri, 2005; & Good et al. 2000).

### Increased GPA

Salinitri (2005) found that mentors and mentees grade point average increased during the mentoring program. In another study, the mean GPAs of the mentors increased by the end of the year by .14 points. (Good et al. 2000). Both studies found the GPA increase made mentors more aware of their roles and encouraged mentees to be involved in the program.

Further, in the Salinitri (2005) study, the mentees reported that mentors provided encouragement related to the university and validated their feelings about their academics and social experiences. The findings also showed that mentors were effectively sharing university resources as well as time management skills and ways to improve academic performance with their mentees which ultimately lead to higher GPAs. The achievement levels of the mentored students were higher than those who enrolled in the University 101 class who did not receive any mentoring (Salinitri, 2005).

### Enhanced study skills

Good et al. (2000) discovered in their study detailed previously in this review, that over 70% of the journals they reviewed included comments regarding academic growth and 50% reported improvement in their study skills as a result of the tutoring component. Twenty-seven percent of the mentees reported growth of critical thinking and problem-solving abilities. The peer mentors indicated that in reviewing the engineering material in various courses

with the mentees, 27% of the peer mentors reported they had a deeper understanding of core engineering concepts (Good et al. 2000).

### Persistence

Torres and Hernandez (2009) studied the persistence (retention) of Latino college students by surveying the mentor/advisor relationships at three urban universities for three years. The design of this study considered the influence of mentoring and advising for the Latino college student experience. The way in which mentor status was determined was by asking, “Do you have a mentor/advisor that helps you with your college choices or encourages you to continue your education?” Depending on the answer to that question, students were separated into two groups; those who identified a mentor/advisor and those who did not identify one.

The three institutions used for this study varied; one had over 90% Latino enrollment, the other had 28% Latino enrollment, and the third was a predominantly White institution with 4% Latino enrollment. One thousand seven hundred seventy-four students were surveyed in 2003 using a pencil and paper survey. From those who responded, 541 were first year Latino students who were eligible for the study. Only 339 continued to the second year, 227 to the third year and finally 171 for year four. Most of the participants were females (64%), 77% were first-generation college students, 74.4% of the participants lived at home with their parents.

The indicators that were found to have the most impact on persistence were family responsibilities, meaning the tension between academics and family obligations. The second highest indicator was cultural affinity, which included the presence of Latinos professionals and culture in the university. The third indicator was faculty satisfaction, followed by academic difficulty, which focused on difficult aspects of a student's life. The fifth indicator consisted of academic integration and finally institutional commitment, meaning how positive a student feels that they are in the right place.

First year data consisted of setting a benchmark for future years. As second- year students, students reported a significantly improved difference in how they intended to persist at the institution. Two of the indicators did not seem to make an impact on the students who had a mentor. Specifically, family responsibility and academic difficulty were more likely associated with the student than with having a mentor. During year two there was a higher value placed on faculty satisfaction, cultural affinity, academic integration and encouragement. Fifty-four percent of third-year students identified having an advisor/mentor compared to 42% in year two. In this group, students without a mentor reported higher levels of family responsibilities than those with mentors. Those responsibilities took away from focusing on their courses. Students with mentors/advisors reported a higher value on faculty satisfaction, cultural affinity, academic integration and institutional commitment than those students without mentors. In the final year of the study, 52% of the students identified an

advisor/mentor and they all had a higher value in faculty satisfaction, cultural affinity, academic integration, institutional commitment, and encouragement. Most of the students were completing their studies in the fourth year, so there was no significance in intent to persist (see Table 2).

Table 2. Change in Persistence Indicated Over Years for Students with Mentors Compared to Students without Mentors

		Year 1 n=54 1	Year 2 n=339	Year 3 n=227	Year 4 n=171
		benc hmar k	42% had mentor	54% had mentor	52% had mentor
1	Family Responsibility		no impact	no impact	no impact
2	Faculty Satisfaction		higher value	higher value	higher value
3	Cultural Affinity		higher value	higher value	higher value
4	Academic Difficulty		higher value	no impact	no impact
5	Academic Integration		higher value	higher value	higher value
6	Institutional Commitment		higher value	higher value	higher value
7	Encouragement		higher value	higher value	higher value

The literature review noted that creating a culture of persistence and continuing education happens between mentors and mentees. In the study by Morales (2009), as part of insider information, mentees reported getting

information about graduate school and careers was one of the assets in having a mentor. In the Morales study, the construct “mentors as approvers” emerged, which was the encouraging and facilitating of educational plans for mentees. The approval theme for mentors meant that the mentees could be more confident about the decisions they made about their education and careers. The mentees in the Morales study received the “stamp of approval” from the mentors about the pathways they chose, also encouraging persistence of the mentees. Similarly, in the study conducted by Hu and Ma (2010), persistence from year one to year two for students in the mentoring program was 83.8% of the participating mentees.

### First Generation Experiences

Expectations and experiences of first-generation college students vary within races because of cultural differences and expectations (Engle, 2007). These students tend to be less engaged and less likely to integrate into college due to cultural values and norms of their families and often feel underprepared for the isolation and alienation they feel when they arrive on campus (Engle, 2007). It has also been noted that first generation students’ value personal connection more than networks when working with a mentor (Ishiyama, 2007; Mekolichick and Gibbs, 2010). Pike and Kuh (2005) found that the experiences of first-generation college students differ from continuing generation students.

According to Mekolichick and Gibbs (2010), first generation students found mentor/mentee relationships to be useful in the sense that knowledge was shared while students whose families had college degrees viewed these

relationships as ways to increase their network and opportunities. They administered a web-based survey to sociology researchers, and they found that mentoring relationships had different outcomes for students.

The survey was sent to five regional sociology associations in 2011 after each of the association's annual conferences. The survey was a version of Ishiyama's (2007) Mentor Role Index, which has three dimensions: 1) the career support index; 2) the research/academic support index, and; 3) the personal consideration index. The participants were also asked to assess the expectations of a good mentor and ranked skills like, "expert in the field" from most important to least important characteristic of a good mentor.

There were 265 respondents who took part in this research project; 78% were White, 74% were women, 62% were continuing generation students, 83% were seniors with the average of 23.7. The results indicated that continuing first generation students emphasized the importance of mentors "standing up for the student" as well as their accessibility as a characteristic of a good mentor. First generation students ranked "being an expert in the field" higher than other participants as well as valuing the mentor status as characteristics of a good mentor. When asked about the benefits of mentoring, continuing students ranked "developing a continuing relationship with a faculty member" higher than first year students. While first generation students ranked, "enhancement of professional or academic credentials" higher.

The qualitative data gathered from 179 participants in the Mekolichick and Gibbs (2010) study were sorted using the Seymour et al. (2004) research method. The seven themes were: Nonspecific positive experiences, personal/professional gains, thinking and working like a scientist, enhanced career/graduate school preparation, changes in attitude towards learning and working as a researcher, skills, and clarification, confirmation, and refinement of career/educational goals. Eighty-three percent of continuing students responded by saying that, “changes in attitude towards learning and working as a researcher” (pg.44) was a benefit from having a mentor. First generation students stated that “skills” gained from their mentor were more beneficial. Finally, 67% of continuing students reported that “professional/personal gains” were most important compared to their first-generation counterparts.

Wang (2012) also studied first generation students and found they felt their time invested was going to payout in the long run. Further, mentees indicated they were able to take courses and add minors as a result of the guidance of their mentor and said the mentees in making decisions about their future goals. These first-generation students also receive messages about family. A mentor shared with a student the importance of family; the mentor did not have family support, which made the student realize how lucky they were to have mentor support. In turn, the student grew closer to her mother since her mentor did not have family support. Recognizing the importance of family meant

remembering their roots and what the family went through. It was important for the mentee to be a role model for the rest of your family.

An important theme that emerged from the Morales (2009) study was the “American dream” and the immigrant experience. In the Morales (2009) study, more than half of the participants said their peer mentors focused on their status as new Americans and the feeling of pride in their accomplishments while at the university. Some of the mentors were also recent immigrants so they related with the mentees. In other words, their similar status connected the mentees with the mentor and therefore the peer mentor could validate the experiences of the students and in turn motivate the mentees to do better in their studies (Morales, 2009).

Ishiyama (2007) interviewed 33 participants of the McNair program at Truman State University the first purpose was to examine the perceptions of mentoring held by first generation African American students, continuing generation African American, and White first-generation college students at a predominately white institution. The second purpose is to better guide research programs in the process of mentor-student pairing that specifically target first-generation college and other students from groups.

Each participant was asked three different sets of questions about how they perceived mentoring relationships; the first set asked about what the student thought the mentor’s role should be and vice versa. The second set asked the

student what they regarded as a benefit from the mentee experience. The third set asked the student to describe “good” mentoring.

The first set of questions asked questions where students had to respond as not important, somewhat important, and very important in regard to the role of mentors in the mentees schooling. The questions varied from asking about career support, research/academic support, research techniques, and guidance on appropriate research techniques, and personal consideration. Personal consideration meaning, if the mentor was a good listener or a “friend” to the mentees.

The second set of questions were about the benefits of mentoring experiences; they were open ended questions and the responses were coded and categorized by themes. The themes were “enhancement of professional or academic credentials”, “clarification of career path”, “understanding the research process in your field”, “learning a topic in depth”, and “developing a continuing relationship with a faculty member.”

Finally, the third set of questions asked about what the mentees would classify as a “good mentor.” From these questions, five themes emerged: “expert in the field”, “accessible”, “friendly”, “communicative of foals and plans”, personally concerned with student’s welfare”, and “helpful with projects.”

The results found that there was no significance in what mentees perceived as a proper role of a mentor. White first generation low-income (FGLI) college students said personal consideration was less important to them

compared to the African American first-generation students in the study. White FGLI students were less likely to see their mentors as someone who could personally support them, as opposed to the African American first-generation students. The results also showed that if an African American student went through the whole McNair program, they considered personal consideration far less due to having access to other research mentoring.

Ishiyama (2007) viewed the mentor and mentee races in order to compare African American mentor/mentee relationships. Out of the 33 participants only five involved African American faculty/student relationships while the other ones were mixed race relationships. A surprising finding was that African American faculty/student mentorship did not emphasize personal support. In fact, mentees felt intimidated by their mentor because they felt pressure to perform well next to someone who “had made it” according to a student.

Of the 33 participants, 11 members of this group mentioned the importance of “enhancement of professional or academic credentials.” However, among the African American first-generation and continuing students they were more likely to mention “clarification of career path” as a benefit of mentoring. The most frequently mentioned benefit for White FGLI was the “enhancement of professional or academic credentials.” For African American first-generation and continuing students, the benefits of “clarification of career path” and “understanding the research process in your field” were most important. White FGLI students consistently mentioned that a good mentor or an expert in the field

was an important trait of a mentor whereas African American students emphasized personal concern as an important quality.

Ultimately, this study found that African American students would emphasize the personal consideration, psychological benefits from research experiences, and personal support as the role of a mentor. That changes when African American students continue through the McNair program, they start to deemphasize personal considerations as an important role of mentors.

Pike and Kuh (2005) examined the self-reported college experiences of 1,127 first-year students at a variety of four-year colleges and universities. They used multi group structural equation models with latent variables to identify interactions between group membership and the effects of student engagement and their characteristics. Since first-generation students tend to be less engaged and gain less from college experience than their counterparts with college-educated parents did. These differences were primarily due to first-generation students having lower educational aspirations and living off campus.

The purpose of this study was to determine whether the differences between first generation and their counterparts were a direct or indirect result of first-generation status. The researchers wanted to address three questions:

1. Are the relationships among background characteristics, engagement, and learning and intellectual development the same for first and second-generation students?

2. Do first- and second-generation college students differ in terms of their backgrounds, levels of engagement during college and reported gains in learning and intellectual development?

3. Are differences between first- and second-generation students directly related to first-generation status, or are they an indirect result of associations between first-generation status and antecedent characteristics or experiences?

The researchers randomly chose 3000 students who took the *College Student Experiences Questionnaire*, and since they only wanted to focus on first year students. They narrowed down their research to 1,127 students, 439 (39%) were first generation and 688 (61%) were second-generation students. The student characteristics used were gender, ethnicity, students' educational aspirations, campus residence, academic engagement, social engagement, students' perceptions of the college environment, and perceived quality of the interpersonal environment.

The research was conducted based on gender (male/female), ethnicity, students' educational aspirations, campus residence, academic engagement, social engagement, and students' perception of the college environment, students' integration of college experiences, and students' gains in learning and intellectual development. Within each category, there were various scales:

Academic engagement: library experiences, active and collaborative learning, writing experiences and interactions with faculty;

Social engagement: personal experiences, student acquaintances and topics of conversations;

Students' perception of college environment: the perceived quality of the academic environment and the perceived quality of the interpersonal environment;

Students' integration of college experiences: academic integration and social integration; and

Students' gains in learning and intellectual development: gains in general education, gains in communication skills, gains in interpersonal development, and gains in intellectual development.

The results found that there were higher levels of academic engagement and social engagement within minority groups, educational aspirations and living on campus. Of all the characteristics, being female was strongly related to high levels of social engagement. None of the characteristics were related to integration as a function of positive relationships in this study. Only living on campus had a positive effect on learning and intellect gains. Overall, female minority students who planned to pursue an advanced degree while living on campus tended to be more engaged with their education.

First- and second-generation students differ in terms of their characteristics, college experiences, and learning outcomes. First-generation students in this study were more likely to be males of a minority group with lower educational aspirations compared to second-generation students. They were

also less likely to live on campus, compared to second-generation students. First generation students reported lower levels of integration and gains as well as perceived lower levels of support. The effects of engagement are transmitted by integration and how students talk about courses outside of the classroom with each other.

It is important to institutions of higher education to “implement interventions that increase the odds that first-generation college students "get ready," "get in," and "get through" by changing the way those students view college and by altering what they do after they arrive” (pg. 292). Engle (2007) points out, institutions should increase access to financial aid, ease transition by creating programming where first-generation students feel supported by peers, and increase engagement with the college environment by removing barriers (usually financial) in which students can join campus organizations and feel a sense of belonging.

The changes first generation college students have compared to continuing students vary; ultimately, educators find ways to assist with the transition and adjustment to the collegiate engagement. Engagement and integration play a part in how students succeed (Torres & Hernandez, 2009; Pike & Kuh, 2005) and progress through their education.

### Summary

In summary, the reviewed studies explained the importance of mentoring among students, and predominantly focusing on the benefits mentoring had on

mentees. There are various experiences students live through as college students highlighting their persistence, self-efficacy, and social capital are just some of the benefits of these types of programs. These studies also established a variety of mentoring experiences and hence the persistence self-efficacy and social capital of participants. Most of the students in the studies wanted someone to connect with at the institution. The next chapter will explain the research design and methods used to complete the study.

## CHAPTER THREE

### RESEARCH AND METHODOLOGY

In this chapter, I will review the purpose of this study as well as the methodology and guiding research questions. The methodology will include data collection methods, data analysis techniques, setting of the study, and information about the participants. Finally, I will review the concept of subjectivity and consider my own subjectivities and how they may impact my study.

This research study used in-depth interviews as well as a retrospective pretest and posttest set of questions during the interview to examine their perceived persistence, self-efficacy, and contribution to social capital of students who participated as peer mentors.

#### Introduction – Purpose of the Study

This mixed-methods study is designed to examine the experiences (Seidman, 2013) of first-generation peer mentors who mentor college students at a four-public university in Southern California. The purpose of the study is to explore the self-perception peer mentors have about how they were impacted in the area of persistence to obtain their degree, their self-efficacy, and the ways in which they built social capital for others. The participants in this study were upper division students (sophomores, juniors, and seniors) and alumni who have been or are currently serving as peer mentors. Research questions listed below:

What are the benefits of participating as a peer mentor at a university have on the peer mentor's perceived persistence in their college education and are they on track to graduate on time?

In what ways does participating in a peer mentoring program as a peer mentor have on that individual's perceived self-efficacy?

In what ways does participating in a university's peer mentoring program as a peer mentor assist in their perception of building social capital for their community?

The importance of this study is to better understand all the benefits associated with having a mentoring program at a university and explaining the particularly lived experience perspective of the mentors themselves. Often, the purpose of these programs is to support different types of students, for example, some universities will build mentoring programs centered on first year students who need extra support, like Salinitri (2005) did in her study. Others like the Gannon and Maher (2012) study researched how students can benefit from being mentored by someone in their field of study. Nonetheless, the mentor experience has usually been secondary to the experiences of the mentees. The Good et al., (2000) study found that mentors who took part in mentoring programs had higher GPAs as they progressed. Retention was mentioned in that study, as an important concept for mentors and it is important to build on that finding.

The life of a mentor and their contribution to the greater community does not stop after their college experience ends, and the benefits of such a program should go beyond graduation. Studying mentors' self-efficacy and their contributions to building social capital for others is important so that recruiting mentors could be easier for universities who want to build their own programs. In addition, it is important to know what program components could be added or refined to enhance mentors' lifelong experiences. Also, universities are a place for lifelong learners, therefore it would be meaningful to capture the impact such programs leave on students' post-graduation.

### Methodology

Since this study seeks to understand the experiences and impact the participation of mentoring programs has on mentors, this study was a mixed-method study. According to Creswell (2013), this narrative research is used to study the lived experiences of current and former mentors. Since this research will study persistence, self-efficacy, and building social capital among mentors who participated in a mentoring program, understanding the experiences of mentoring will be key in explaining how mentors benefit from such programs.

This study, in seeking to understand the perceived impact of participating in a university's mentoring program, will explore the mentor experience with a group of students who are either current or former mentors, who have all experienced the same or similar types of programs, which gives meaning to the individuals and social levels (Polkinghorne, 1984). Through the gathering of

these student experiences, this research may build on understanding of the benefits of participating as a mentor to mentors and may influence how mentoring programs will be built in the future.

### Research Methods

In order to respond to the research questions, two data sources will be used: interviews and with a retrospective pre-post survey administered during the interview process. The setting for this study was at one of the 23 California State Universities. This University offers baccalaureate degrees, master's degrees, and doctoral degree, along with a variety of support services for student success. Such services include financial aid counselors, academic advising, honors programs, various peer mentoring programs, tutoring and supplemental instruction. The diverse student population consists of 20,311 students, 64.4% Hispanic or Latino, 11.9% White, 5.11% Asian, and 4.9 % African American. 61% of the students are female. Also, 74% of the students are first-generation college students.

In order to recruit participants, the researcher will contact directors of the various mentoring programs at the university. The directors will be asked to contact all mentors who have been part of the mentoring program for at least 2 years as well as reaching out to their mentors who are alumni (within 2 years) with a request to participate in the study. The interviews will bring an understanding of student's self-awareness regarding their persistence, self-

efficacy, and social capital. The goal of selection of participants will be to interview students who match the university demographics.

### Instrumentation

The interview guide used for the interviews will first focus on the demographics of the mentors to identify their participation as a mentor. The guide will also ask questions about the mentor's persistence towards their degree to understand the perceived impact of the program. The questions about persistence aim to explain any changes the mentors saw in their education and outlook on what they had to do to finish their degree.

A 4-point Likert scale will be used in the retrospective pretest-posttest design to measure the mentor's opinion about themselves pre-mentoring program as well as their opinions of themselves post their participation in the mentoring program. Capturing the changes in the mentor's pre-entering any mentoring program can be difficult, since this research will only contact former mentors, however there is literature that notes that retrospective posttest can capture important post hoc data.

According to Abdulghani et al. (2004), it is best to conduct a pre and post survey in order to assess the changes in participants' understanding and knowledge of their experiences. Little et al. (2020) suggested using retrospective pretest posttest (RPP) allows participants to gauge the changes they have experienced with greater awareness and precision. RPP is also better suited to detect any changes from an intervention, like being part of a mentoring program

at a university. This data collection method is especially important since this dataset will be too small to run a statistical analysis, therefore this method will at least allow for calculating the mean differences in the attitudes of the participants (Little et al., 2020). The interview guide questions were developed after examining the literature on persistence, self-efficacy, and social capital; the questions are included below.

### *Demographics*

1. Tell me about why you chose to be a mentor?
2. In what mentoring program did you participate and at what university?
3. What academic years did you participate (freshman, sophomore, etc.)?
4. Do you identify as first-generation? The Department of Education states that first-generation is defined as students whose neither parent have completed a bachelor's degree in the United States.
5. Do you identify as Male, Female or Other?
6. What is your race (Caucasian, Latino/a, Black, Asian, Southeast Asian, Other?)
7. What was your age when you were participating in the mentoring program?
8. In what county do you live?
9. In what other campus programs did you participate (e.g., clubs, sports, etc.)?

### *Persistence*

1. Tell me how did participating in the mentoring program impact your ability to continue your college studies?
2. Tell me what was the most valuable part of being a mentor?
3. Tell me about the way being a mentor makes you a better student?
4. Do you believe the term “role model” applies to you, and if yes, in what ways?
5. Tell me about what you think you gained by participating in the mentoring program – personally and academically?
6. Describe how your study habits change, if at all, as a result of being a mentor?
7. Describe how your interactions with the faculty change, if at all, as a result of being a mentor?
8. In what ways, if at all, did your participation in the mentoring program impact the pace of finishing your college degree?
9. Tell me what you have learned about yourself as a result of your participation in the mentoring program?

*Contribution to Self-Efficacy* - Self-efficacy is defined as the person’s belief in their ability to succeed in a particular task (Bandura, 1977).

Open-ended Questions related to Self-Efficacy:

1. Tell me about the opportunities have you taken advantage of that you might not have if you had not participated in the mentoring program?

2. Are you considering going on to graduate school and if yes, what role if any did the mentoring program play in your decision?

### Pre and Post Responses

Directions to be read: Think back to before you participated as a mentor and answer the questions how you would have before you were a mentor. On a Scale of 1 to 4 with 1 being “strongly disagree” to 4 being “strongly agree” rate the following statements.

*Before* I participated in the mentoring program:

1. Before I was a mentor, I believed I would be able to achieve most of the goals that I have set for myself.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

2. Before I was a mentor, when facing difficult tasks, I was certain that I would accomplish them.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

3. Before I was a mentor, I believed that I would be able to successfully overcome many challenges.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

4. Before I was a mentor, I believed that in general, I thought I could obtain outcomes that are important to me.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

5. Before I was a mentor, I believed that I could succeed at almost any endeavor to which I set my mind.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

6. Before I was a mentor, I was confident that I could perform effectively on many different tasks.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

7. Before I was a mentor, I believed that compared to other people, I could do most tasks very well.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

8. Before I was a mentor, I believed that even when things were tough, I could perform quite well.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

*After* I participated in the mentoring program:

Directions to be read: Think back to after you participated as a mentor and answer the questions how you would have after you were a mentor.

1. I believe I am able to achieve most of the goals that I have set for myself.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

2. When facing difficult tasks, I am certain that I can accomplish them.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

3. I believe that I am able to successfully overcome many challenges.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

4. I believe that in general, I think I can obtain outcomes that are important to me.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

5. I believe that I can succeed at almost any endeavor to which I set my mind.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

6. I am confident that I can perform effectively on many different tasks.

1	2	3	4
---	---	---	---

Strongly Disagree                  Disagree                  Agree                  Strongly Agree

7. I believe that compared to other people, I can do most tasks very well.

1    2    3    4

Strongly Disagree                  Disagree                  Agree                  Strongly Agree

8. I believe that even when things are tough, I can perform quite well.

1    2    3    4

Strongly Disagree                  Disagree                  Agree                  Strongly Agree

*Contribution to Social Capital* - Social Capital is defined as an aspect of social structures and how they facilitate certain actions within the structure (Coleman, 1988).

*Open-ended Questions related to social capital:*

1. Describe any unexpected benefits that you gained as a member of the mentoring program?
2. Has your involvement in the mentoring program led you to participate in new community activities or volunteer your time more?
3. Has your thinking changed in any way because of your interaction with your mentees? (Your involvement in the program?)

On a Scale of 1 to 4 with 1 being “never” to 4 being “very frequently” rate the following statements.

*Before* I participated in the mentoring program:

Directions to be read: Think back to before you participated as a mentor and answer the questions how you would have before you were a mentor.

1. Before you were a mentor, how often did you talk to your friends or family about current events?

1	2	3	4
Never	Rarely	Frequently	Very Frequently

2. Before you were a mentor, how often did you talk to your friends or family about social issues such as peace, justice, human rights, equality, race relations?

1	2	3	4
Never	Rarely	Frequently	Very Frequently

3. Before you were a mentor, how often did you talk to your friends or family about the arts (painting, poetry, theatrical productions, dance, Symphony, movies etc.?)

1	2	3	4
Never	Rarely	Frequently	Very Frequently

4. Before you were a mentor, how often did you talk to your friends or family about different lifestyles, customs, and religions?

1	2	3	4
Never	Rarely	Frequently	Very Frequently

5. Before you were a mentor, how often did you talk to your friends or family about social, and ethical issues related to science and technology such as energy, pollution, chemicals, genetics, military use?

1	2	3	4
---	---	---	---

Never          Rarely          Frequently      Very Frequently

6. Before you were a mentor, how often did you talk to your friends or family about the economy (employment, wealth, poverty, debt, trade, etc.)?

1                  2                  3                  4

Never          Rarely          Frequently      Very Frequently

7. Before you were a mentor, how often did you talk to your friends or family about the cost of college and how they might be able to pay for it?

1                  2                  3                  4

Never          Rarely          Frequently      Very Frequently

8. Before you were a mentor, how often did you talk to your friends or family about how to go about applying for college?

1                  2                  3                  4

Never          Rarely          Frequently      Very Frequently

9. Before you were a mentor, how often did you talk to your friends or family about the coursework that needed to be completed to be successful in college?

1                  2                  3                  4

Never          Rarely          Frequently      Very Frequently

10. Before you were a mentor, how often did you talk with your friends, siblings, or others about why one should go to college?

1                  2                  3                  4

Never          Rarely          Frequently      Very Frequently

After I participated in the mentoring program:

1. After your time as a mentor, how often did you talk to your friends or family about current events?

1	2	3	4
Never	Rarely	Frequently	Very Frequently

2. After your time as a mentor, how often did you talk to your friends or family about social issues such as peace, justice, human rights, equality, race relations?

1	2	3	4
Never	Rarely	Frequently	Very Frequently

3. After your time as a mentor, how often did you talk to your friends or family about the arts (painting, poetry, theatrical productions, dance, Symphony, movies etc.?)

1	2	3	4
Never	Rarely	Frequently	Very Frequently

4. After your time as a mentor, how often did you talk to your friends or family about different lifestyles, customs, and religions?

1	2	3	4
Never	Rarely	Frequently	Very Frequently

5. After your time as a mentor, how often did you talk to your friends or family about social, and ethical issues related to science and technology such as energy, pollution, chemicals, genetics, military use?

1	2	3	4
Never	Rarely	Frequently	Very Frequently

6. After your time as a mentor, how often did you talk to your friends or family about the economy (employment, wealth, poverty, debt, trade, etc.)?

1	2	3	4
Never	Rarely	Frequently	Very Frequently

7. After your time as a mentor, how often did you talk to your friends or family about the cost of college and how they might be able to pay for it?

1	2	3	4
Never	Rarely	Frequently	Very Frequently

8. After your time as a mentor, how often did you talk to your friends or family about how to go about applying for college?

1	2	3	4
Never	Rarely	Frequently	Very Frequently

9. After your time as a mentor, how often did you talk to your friends or family about coursework that needed to be completed to be successful in college?

1	2	3	4
Never	Rarely	Frequently	Very Frequently

10. After your time as a mentor, how often did you talk with your friends, siblings, or others about why one should go to college?

1	2	3	4
Never	Rarely	Frequently	Very Frequently

#### Data Collection

For this study, I am beginning with the assumption there needs to be approximately ten participants. For the purpose of the study, I will aim to interview as many participants needed to reach data saturation. Saunders et al., (2018) point out that various researchers point to data saturation as the “gold standard” in assessing research. According to Guest, Bunce, and Johnson (2006), when participants have common characteristics data saturation can be reached between 10 and 12 interviews. Furthermore, Morse (1995) stated that there are no published guidelines or tests for estimating sample size to reach saturation.

Participants will be selected based on recommendations from mentor program coordinators and will be from a narrow, restricted source, so saturation can be achieved faster and from a smaller sample Morse (1995). The study by Saunders et al., (2018) found that information redundancy occurs once nothing new is apparent in interviews.

The interviewees will be current students or recent alumni (within the last two years) who have taken part in a mentoring program at the university. The students who participated as mentors all lived in the Inland Empire and were

involved in a mentoring program at a university for at least two years.

Participants will be offered a \$10 Starbucks gift card for their participation in the study.

If 10 participants are not readily identified, a snowball sampling will be used, where a participant gives the researcher the name of another possible participant who can possibly provide another participant and so on (Vogt, 1999). This form of sampling takes advantage of the social networks each participant has, developed during their mentoring experience.

After participants have been identified, an email will be sent out to contact a meeting time for the interviews. Each interview will last about 45 minutes and each session will be conducted via zoom. Each session will be recorded in order to use recordings to transcribe interviews. Zoom currently allows for transcription of meetings to be downloaded. After each session, the file will be downloaded and played back to ensure accuracy. Participants will be given an informed consent letter so they are aware of the time commitment and their ability to not answer some of the questions should they not wish to answer them.

### Data Analysis

The majority of quantitative data will be composed of the RPP in which the mean differences will be used to identify the perceived impacts in the variables being studied before and after participating as a mentor (Little et al., 2020). This type of assessment can be used to identify the program effectiveness as well as

measure student's own awareness of themselves (Little et al., 2020). Descriptive statistics will be used to analyze the data from the pre/post questionnaire.

In order to understand the lived experiences of these former mentors', common themes will be coded from the qualitative open-ended questions and will be validated through inter-rater reliability by the dissertation chair. The signal for reaching data saturation will be determined by the investigator and by evaluating the comprehensiveness of the results (Morse, 1995). Van Manen (1990) stated that the themes in lived experiences research are structures of experience and the data will move from narrow units of analysis to detailed description (Creswell, 2013) of the lived experience. With the transcription provided by zoom themes will be coded using NVIVO.

#### Validity and Reliability

The interview questions were reviewed for content validity by three education professionals who have experience in higher education research and survey development. In addition, a pilot session will be conducted to test the validity and reliability of the interview questions with two former peer mentors who recently graduated from the university.

Table 3. Research Questions and Interview Questions Alignment

Interview questions	Q1 - What are the benefits of participating as a peer mentor at a university on the peer mentor's persistence in their college education and are they on track to graduate on time?	Q2 - In what ways does participating in a peer mentoring program as a peer mentor have on that individual's self-efficacy?	Q3 - In what ways does participating in a university's peer mentoring program as a peer mentor assist in building social capital for their community?
Tell me how did participating in the mentoring program impact your ability to continue your college studies?	X		
Tell me what was the most valuable part of being a mentor?		X	X
Tell me about the way being a mentor makes you a better student?	X	X	X
Do you believe the term "role model" applies to you, and if yes, in what ways?		X	
Tell me about what you think you gained by participating in the mentoring program – personally and academically?	X	X	X

Interview questions	Q1 - What are the benefits of participating as a peer mentor at a university on the peer mentor's persistence in their college education and are they on track to graduate on time?	Q2 - In what ways does participating in a peer mentoring program as a peer mentor have on that individual's self-efficacy?	Q3 - In what ways does participating in a university's peer mentoring program as a peer mentor assist in building social capital for their community?
Describe how your study habits changed, if at all, as a result of being a mentor?	X	X	
Describe how did your interactions with the faculty change, if at all, as a result of being a mentor?	X		
In what ways, if at all, did your participation in the mentoring program impact the pace of finishing your college degree?	X	X	
Tell me about what you have learned about yourself as a result of your participation in the mentoring program?		X	X
Tell me about the opportunities have you taken advantage of that you might not have if you had not participated in the mentoring program?	X		X

Interview questions	Q1 - What are the benefits of participating as a peer mentor at a university on the peer mentor's persistence in their college education and are they on track to graduate on time?	Q2 - In what ways does participating in a peer mentoring program as a peer mentor have on that individual's self-efficacy?	Q3 - In what ways does participating in a university's peer mentoring program as a peer mentor assist in building social capital for their community?
Are you considering going on to graduate school and if yes, what role if any did the mentoring program play in your decision?		X	X
<i>Before I participated in the mentoring program:</i>			
I believed I would be able to achieve most of the goals that I have set for myself.		X	
When facing difficult tasks, I was certain that I would accomplish them.		X	
I believed that I would be able to successfully overcome many challenges.		X	
I believed that in general, I thought I could obtain outcomes that are important to me.		X	
I believed that I could succeed at almost any endeavor to which I set my mind.		X	

Interview questions	Q1 - What are the benefits of participating as a peer mentor at a university on the peer mentor's persistence in their college education and are they on track to graduate on time?	Q2 - In what ways does participating in a peer mentoring program as a peer mentor have on that individual's self-efficacy?	Q3 - In what ways does participating in a university's peer mentoring program as a peer mentor assist in building social capital for their community?
I was confident that I could perform effectively on many different tasks.		X	
I believed that compared to other people, I could do most tasks very well.		X	
I believed that even when things were tough, I could perform quite well.		X	
<i>After I participated in the mentoring program:</i>			
I believe I am able to achieve most of the goals that I have set for myself.		X	
When facing difficult tasks, I am certain that I can accomplish them.		X	
I believe that I am able to successfully overcome many challenges.		X	
I believe that in general, I think I can obtain outcomes that are important to me.		X	

Interview questions	Q1 - What are the benefits of participating as a peer mentor at a university on the peer mentor's persistence in their college education and are they on track to graduate on time?	Q2 - In what ways does participating in a peer mentoring program as a peer mentor have on that individual's self-efficacy?	Q3 - In what ways does participating in a university's peer mentoring program as a peer mentor assist in building social capital for their community?
I believe that I can succeed at almost any endeavor to which I set my mind.		X	
I am confident that I can perform effectively on many different tasks.		X	
I believe that compared to other people, I can do most tasks very well.		X	
I believe that even when things are tough, I can perform quite well.		X	
Describe any unexpected benefits that you gained as a member of the mentoring program?			X
Has your involvement in the mentoring program led you to participate in new community activities or volunteer your time more?		X	X

Interview questions	Q1 - What are the benefits of participating as a peer mentor at a university on the peer mentor's persistence in their college education and are they on track to graduate on time?	Q2 - In what ways does participating in a peer mentoring program as a peer mentor have on that individual's self-efficacy?	Q3 - In what ways does participating in a university's peer mentoring program as a peer mentor assist in building social capital for their community?
Has your thinking changed in any way because of your interaction with your mentees? (Your involvement in the program?)	X	X	X
<i>Before I participated in the mentoring program:</i>			
How often did you talk to your friends or family about current events?			X
How often did you talk to your friends or family about social issues such as peace, justice, human rights, equality, race relations?			X
How often did you talk to your friends or family about the arts (painting, poetry, theatrical productions, dance, Symphony, movies etc.?)			X
How often did you talk to your friends or family about different lifestyles, customs, and religions?			X

Interview questions	Q1 - What are the benefits of participating as a peer mentor at a university on the peer mentor's persistence in their college education and are they on track to graduate on time?	Q2 - In what ways does participating in a peer mentoring program as a peer mentor have on that individual's self-efficacy?	Q3 - In what ways does participating in a university's peer mentoring program as a peer mentor assist in building social capital for their community?
How often did you talk to your friends or family about social, and ethical issues related to science and technology such as energy, pollution, chemicals, genetics, military use?			X
How often did you talk to your friends or family about the economy (employment, wealth, poverty, debt, trade etc)			X
How often did you talk to your friends or family about the cost of college and how they might be able to pay for it?			X
How often did you talk to your friends or family about how to go about applying for college?			X
How often did you talk to your friends or family about coursework that needed to be completed to be successful in college?			X

Interview questions	Q1 - What are the benefits of participating as a peer mentor at a university on the peer mentor's persistence in their college education and are they on track to graduate on time?	Q2 - In what ways does participating in a peer mentoring program as a peer mentor have on that individual's self-efficacy?	Q3 - In what ways does participating in a university's peer mentoring program as a peer mentor assist in building social capital for their community?
How often did you talk with your friends, siblings, or others about why one should go to college?			X
<i>After I participated in the mentoring program:</i>			
How often did you talk to your friends or family about current events?			X
How often did you talk to your friends or family about the arts (painting, poetry, theatrical productions, dance, Symphony, movies etc.?)			X
After your time as a mentor, how often did you talk to your friends or family about different lifestyles, customs, and religions?			X

Interview questions	Q1 - What are the benefits of participating as a peer mentor at a university on the peer mentor's persistence in their college education and are they on track to graduate on time?	Q2 - In what ways does participating in a peer mentoring program as a peer mentor have on that individual's self-efficacy?	Q3 - In what ways does participating in a university's peer mentoring program as a peer mentor assist in building social capital for their community?
How often did you talk to your friends or family about social, and ethical issues related to science and technology such as energy, pollution, chemicals, genetics, military use?			X
How often did you talk to your friends or family about the economy (employment, wealth, poverty, debt, trade, etc.)?			X
After your time as a mentor, how often did you talk to your friends or family about the cost of college and how they might be able to pay for it?			X
After your time as a mentor, how often did you talk to your friends or family about how to go about applying for college?			X

Interview questions	Q1 - What are the benefits of participating as a peer mentor at a university on the peer mentor's persistence in their college education and are they on track to graduate on time?	Q2 - In what ways does participating in a peer mentoring program as a peer mentor have on that individual's self-efficacy?	Q3 - In what ways does participating in a university's peer mentoring program as a peer mentor assist in building social capital for their community?
After your time as a mentor, how often did you talk to your friends or family about the coursework that needed to be completed to be successful in college?			X
How often did you talk with your friends, siblings, or others about why one should go to college?			X

Reliability and context validity were established during the pilot studies by two former mentors who gave feedback about the interview guide and structure of the questions. The interviews took place during the COVID-19 pandemic and were therefore conducted via video conference (Zoom). Pseudonyms were given to the two participants; Claire and Kiley participated in the mentoring program during their time at A major University in Southern California. Claire graduated in 2019 with her bachelor's degree and Kiley graduated with her master's degree in 2020. Both participants suggested initiating a conversation with potential participants in case any of them were nervous to take part in study. "People love talking about their stories." Claire stated.

Starting with the demographics section of the questionnaire, their suggestions were as follows. Claire and Kiley suggested a generational question, "Do you identify as a first-generation college student?" They suggested that question because they are both first generation and they said that their goal as a mentor was to provide a service for students like themselves. Another recommendation from the two participants includes asking about the financial aid status of the mentors. The reasoning for the questions was to determine if aid was needed, they believed that mentors not needing financial aid might have a different type of ownership of the position as opposed to students who were on federal work study.

The second section of the interview guide was on persistence, they both suggested rewording some of the questions because they were too long. For

example, “did participating as a mentor make you a better student, and if yes, how did participating in the mentoring program make you a better student?” they suggest I only ask the first part, and leave it as: “did participating as a mentor make you a better student?” Kiley was happy to hear a question about faculty in this section because she said that her experience as a mentor gave her confidence to talk to her faculty about graduate school and the university honors program.

They also had some suggestions on the third section on self-efficacy. In particular they both thought I should define the term self-efficacy, “in case someone doesn’t know what that means” they said. The pre and post questions started here and the section of questions included a Likert scale ranging from strongly disagreeing to strongly agree and they wanted to see the options on the screen so that they could refer back to them as they thought about their time before they were mentors (and after) for each section. Claire liked that this section had her thinking about her life as a mentor first, “kept in that pre-mindset” she said. Therefore, when we shifted to the same questions asking about her life after the mentoring program, she had an easy time adjusting. Finally, in the open-ended question section they liked that they were able to talk about specific examples of their self-efficacy.

The fourth section of the interview guide focuses on social capital, and again both participants suggested I define “social capital” for potential participants. During this section, I asked the pre and post questions back-to-

back, “before your time as a mentor...” and followed by, “after your time as a mentor...” Kylie believed that this way of questioning was easier for her to respond to because she stayed in the same mind frame in regard to the question being asked. There are a couple questions about social justice and they both appreciated the relevance to the questions in regard to current events.

Overall, the pilot study participants felt the interview guide was clear and would provide consistent and accurate information.

### Summary

In this chapter, the design that will be used was outlined. The data collection will answer the study’s three research questions; first, “What is the perceived impact of participating as a peer mentor at a university on the peer mentor’s persistence in their college education and do they graduate in four years?” Second, “What perceived impact does participating in a peer mentoring program as a peer mentor have on that individual’s self-efficacy?” and finally “In what ways does participating in a university’s peer mentoring program as a peer mentor assist in building social capital for their community?” Interviews will be conducted with 10 first-generation, former mentors from a four-year university in Southern California. The data will be analyzed, for common themes and mean differences in pre-post responses. The following chapter will provide the findings and results from the data collected.

## CHAPTER FOUR

### RESULTS

This chapter presents the findings from the research study. This mixed methods study sought to understand the experiences of first-generation peer mentors at a public four-year university in the Inland Empire. The research design was set up to understand the perceived impact of mentoring programs on mentor's academic persistence, self-efficacy, and social capital. The three research questions that guided the study were as follow: what is the perceived impact of participating as a peer mentor at a university have on the peer mentor's persistence in their college education and do they graduate in four years?; What perceived impact does participating in a peer mentoring program as a peer mentor have on that individual's self-efficacy?; and finally, In what ways does participating in a university's peer mentoring program as a peer mentor assist in building social capital for their community?; This study was not set up to generalize the experiences of all first-generation peer mentors but instead, it was set up to understand how persistence, self-efficacy, and social capital gains were a byproduct of their involvement in the programs at the university.

#### Demographics

All ten interview participants were first-generation college students, and all the names of the participants are pseudonyms. The interview participants included Eric, a senior who has been a mentor for 3 years, Jen, a senior who has

been a mentor for 2 years, Maria, a grad student who has been a mentor for over 4 years, Isabel , a senior who has been a mentor for 2 years, Christy, a senior who has been a mentor on and off for 3 years, Vicki , a senior who has been a mentor for 2 years, Karla, a fifth year senior who has been a mentor for 3 years, Lily , a junior who has been a mentor for 2 years, Stephanie, a junior who has been a mentor for 2 years, Wendy, a junior who has been a mentor for 2 years academic status of these participants were verified though the university registration system as part of the triangulation. A complete breakdown of demographics for each participant is included in tables below (see Tables 4-7 below).

Table 4. Gender

	<i>n</i>	%
Female	8	80
Male	1	10
Other	1	10
Total	10	100

Table 5. Race

	<i>n</i>	%
Latina	7	60
Latino	1	20
Asian	1	10
Other	1	10
Total	10	100

Table 6. Academic Years

	<i>n</i>	%
Sophomore	4	40
Junior	5	50
Grad	1	10
Total	10	100

Table 7. County of Residence

	<i>n</i>	%
San Bernardino	6	60
Riverside	4	40
Total	10	100

Each mentor was asked their reasons for taking part of the mentoring program, as well as the name of the program, and about their involvement in the university outside the mentoring program. Table (8) below explains each response as to why students became mentors. Twenty-two percent of the mentors became mentors because they started as mentees their first year. Jen stated, “She was my role model; I wanted to be like her” (Personal Communication, December 16, 2020). Jen talked about her positive previous experience as a mentee and that her mentor guided her during her academic career. Eleven percent of the participants saw a correlation to their future careers. Wendy stated she has plans to go into counseling, she said, “I know being a mentor isn’t like being a counselor, but it is kind of the same set up. I like the 1:1 with students” (Personal Communication, March 11, 2021).

Table 8. Why You Chose to Be a Mentor

	<i>n</i>	%
Previous experience as mentee	6	22
Gain professional development	3	11
Mentor program is a support system	3	11
Desire to give back to community	3	11
Benefits of job training	2	7
Building a network of support for self and others	2	7
Hands on support with course selection	2	7
Resource sharing	2	7
Mentor as only friend	2	7
Access to fellowships	2	7
Learning about setting boundaries	1	4
Study abroad opportunity	1	4
* % to total may not add to 100% due to rounding	Total 27	100*

The university houses various mentoring programs, most of the participants (60%) for this study hailed from the Student Mentoring Program, (see Table 9 below). The Virtual Ambassadors are fairly new to the mentoring programs at the university, only 20% of the participants came from that program. Representation from the undocumented students as well as the office of student research also took part in the study.

Table 9. Name of Mentoring Program

	<i>n</i>	%
Student Mentoring Program	6	60
Virtual Ambassadors	2	20
Undocumented Student Success Center	1	10
Office of Student Research	1	10
	Total 10	100

The mentors were involved in other activities in addition to being mentors; 39% of the participants were active in university organizations ranging from supporting the Career Center to other federally-funded grant programs. Twenty-eight percent of the mentors were active members of campus student clubs ranging from religious clubs like the Catholic Newman Club to major-specific clubs like Psychology Club (see Table 10).

Table 10. Other Activity Involvement

	<i>n</i>	%
University organization	7	39
Campus club	5	28
Other campus job	3	17
None	2	11
Honor society	1	6
* % to total may not add to 100% due to rounding	Total 27	100*

### Research Questions 1: Persistence

#### Qualitative interview data

In the studies by Hu and Ma, (2010); Tinto, (2017); Kuh, (2009); the researchers viewed persistence as the skills students should have by the time they graduate from college. Students who are first in their families to attend college often struggle navigating higher education, which can hinder the persistence of students (Hu & Ma, 2010). Astin (1999) stated that students who are involved at their universities achieve higher persistence rates. Involvement

can include extracurricular activities and participating in activities outside the classroom, which is what the mentors who participated in this study did.

When asked how the mentoring program impacted the mentor ability to continue their college studies, 13% stated that the network they were able to build was impactful for them. Vicki expressed that she wanted to be more networked to help her students and in turn she learned about the resources she could use for herself as well. According to the Colvin and Ashman (2010) study, providing a sense of belonging and having a sense of belonging are factors that impacted a mentor's ability to continue their college studies, Jen said, "I found my place on campus" (Personal Communication, December 16, 2020) after she joined the program. The mentoring program also provided a place for academic major exploration; Maria started as a Spanish major but decided that Communication Studies was better for her skillset. The mentoring program connections taught her to reach out to advising staff in order to figure out what she needed to do to change her major.

A sense of belonging theme emerged through peer mentors helping mentees inside and outside the classroom through getting involved in campus activities and making the mentees feel more comfortable on campus as well as assisting them in being aware of the resources available to them, which was similar to the research findings of Colvin and Ashman, 2010.

Another interesting finding was the importance of job training, which showed up in different ways in the data. For example, Eric talked about

developing better study skills (4% of the participants benefited from it), and Stephanie talked about her increased time management skills (8% of the participants benefited from it). Connecting with various departments such as advising and tutoring were also important for the mentors in continuing their college studies. Participants indicated the following topics were also covered during their trainings as professional development at mentor meetings (see Table 11).

Table 11. How Did Mentoring Impact Your Ability to Continue Your College Studies?

	<i>n</i>	%
Building a network of support for self and others	3	13
Sense of belonging	3	13
Change of major due to mentoring job	2	8
Desire to give back to community	2	8
Increased ability to time manage	2	8
Being accountable to others	1	4
Building confidence in self	1	4
Career advancement	1	4
Connecting with resources on campus advising	1	4
Connecting with resources on campus tutoring/SI	1	4
Develop professional development	1	4
Developed better study habits	1	4
Empathetic towards self and others	1	4
Motivation for self	1	4
Resource sharing	1	4
Willing to seek relationships instead of waiting for them to come	1	4
Willingness to attend office hours	1	4
* % to total may not add to 100% due to rounding	Total 24	100*

Relationships and networks build on the value of mentors (Good et al., 2000). Good et al. (2000), found that personal growth is important for mentors and by being part of the mentoring program they were able to learn about campus resources for themselves plus for their mentees. Mentors are also able to develop leadership skills by being part of the mentoring program, the Good et al. (2000) study found that the leadership skills gained by mentors were confidence, better communication skills as well as identity.

Overall, relationships were impactful to mentors in the study. Twenty percent of the participants valued the relationship with the mentees and 12% said that building a network of support for self and others were the most valuable parts of being a mentor. Wendy stated, “My most favorite part is seeing students grow over time” (Personal Communication, March 11, 2021). The relationships with other mentors were also important for the mentors in this study. Jen, one of the 12% of the participants that felt building relationships was important, stated that she liked that they were able to collaborate and share information and ideas with each other (see Table 12).

Table 12. Most Valuable Part of Being a Mentor

	<i>n</i>	%
Building relationships with mentees	5	20
Building a network of support for self and others	3	12
Building relationships with mentors	3	12
Desire to give back to community	3	12
Increased ability to time manage	2	8
Building relationships with staff	1	4
Desire to be active members of campus (attend events)	1	4

Professional development opportunities	1	4
Increased job duties/responsibilities	1	4
Learning about setting boundaries	1	4
Learning how to advocate for self	1	4
Motivation for self	1	4
Willing to seek relationships instead of waiting for them to come	1	4
Witnessing development of mentees	1	4
Total	25	100

Salinitri (2005) found that mentors had increased time management skills and improved their academic performance (higher GPAs) while the participated in the mentoring program. As far as job training goes, Good et al. (2000) examined the trainings attended by the mentors, these training included role-playing and evaluations, where the mentors gained new skills on how to be successful students and mentors for their mentees. Relationships between mentors and mentees are also valuable. Morales (2009), studied “what are the common themes of mentoring relationships and how, if at all, are the relations effective in facilitating the participants’ educational progress/standing?” (pg. 389).

Participants reported increased time management skills due to the trainings they received. The trainings were intended for mentors to support mentees, but Eric mentioned that the skills from the trainings helped him be a better student as well. Twenty-five percent of the mentors reported an increase in time management skills and 17% of the participants reported that job trainings were helpful for their success (see Table 13). Part of being a better student meant building relationships for these mentors, 8% mentioned that learning from

each other was helpful, Christy stated “even though they are younger than me, I learn from them” (Personal Communication, February 22, 2021).

Table 13. How Being a Mentor Made You a Better Student?

	n	%
Increased ability to time manage	6	25
Benefits of job training	4	17
Building relationships with mentees	2	8
Building relationships with mentors	2	8
Developed better study habits	2	8
Motivation for self	2	8
Self-awareness	2	8
Better people skills	1	4
Building confidence in self	1	4
Learned effective communication skills	1	4
Motivator for students	1	4
* % to total may not add to 100% due to rounding	Total 24	100*

According to Colvin and Ashman (2010) and Good et al. (2000), mentors are seen as learning coaches, which consequently inspire mentors to act as role models for their mentees. Often times mentors are viewed as role models (Pike & Kuh, 2005; Good et al. 2000; Wang, 2012), which can contribute to the self-efficacy of the mentor. The positive outcome of such relationships contributes to the skills of the mentee and helps the mentor feel more confident about their own skills (Bandura, 1977).

Most of the participants viewed themselves as role models, 53% were aware of the title of role model (see Table 14). Christy said, “yes, all of us in the position have to be role models because we have first-year student not knowing

what to do, so we guide them” (Personal Communication, February 22, 2021). Stephanie felt that she has to model behaviors of successful students because her mentees look up to her, which in turn motivates mentees to do better. Twelve percent of the participants felt they were motivators for students. Lily said, “The students feel they can rely on me when they need something” (Personal Communication, March 5, 2021). Twelve percent of the participants noted that they saw themselves as leaders too, “a leader is knowledgeable” said Vicki (Personal Communication, February 23, 2021).

Table 14. “Role Model” Applies to You, And If Yes, In What Ways?

	<i>n</i>	%
Role model awareness	9	53
Motivator for students	2	12
Ownership of leadership position	2	12
Building a network of support for self and others	1	6
Increased mental health awareness of self	1	6
Learned effective communication skills	1	6
Self-awareness	1	6
* % to total may not add to 100% due to rounding	Total 17	100*

Personal and academic benefits for being a mentor for example, 13% saw an increase in their time management skills; and 13% became more self-aware of how they carried themselves into the future (see Table 15). Along with their self-awareness, 8% of the participants saw an increase in their self-confidence. Lily said, “I used to be shy when I started the program and now I am able to work well with others” (Personal Communication, March 5, 2021). Relationships are

important for the participants both academically and personally, Wendy stated that having her supervisor and fellow mentors around had been helpful during COVID-19; “I have people to talk to, building friendships with everyone has been great” (Personal Communication, March 11, 2021).

Table 15. Gained by Participating In the Mentoring Program – Personally and Academically

	<i>n</i>	%
Increased ability to time manage	3	13
Self-awareness	3	13
Building confidence in self	2	8
Building relationships with mentors	2	8
Building relationships with staff	2	8
Motivator for students	2	8
Benefits of job training	1	4
Building a network of support for self and others	1	4
Change of major due to mentoring job	1	4
Develop professional development	1	4
Learned effective communication skills	1	4
Learned how to be a better student	1	4
Patience working with students	1	4
Role model for own family	1	4
Thinking about grad school	1	4
Willing to ask for support from others	1	4
* % to total may not add to 100% due to rounding	Total 24	100*

Twenty-eight percent of the participants developed better study habits as a result of being a mentor (see Table 16). Eric and Wendy mentioned that they do not want to procrastinate because they want to show mentees how to be better. Wendy said, “I feel guilty when I am not studying” (Personal Communication, March 11, 2021). Along with studying more, Maria mentioned

setting deadlines was part of her time management, “better done than perfect” was her motto (Personal Communication, February 11, 2021). The mentor trainings had an impact on mentors’ awareness of others (as well as themselves), especially when it came to different learning styles, 8% of the participants saw a change. Related to the various stages of learning, Stephanie said, “I end up learning from my coworkers” (Personal Communication, February 11, 2021).

Table 16. How Your Study Habits Changed, If at All, as A Result Of Being a Mentor

	<i>n</i>	%
Developed better study habits	7	28
Increased ability to time manage	4	16
Benefits of job training	3	12
Awareness of different learning styles	2	8
Motivator for students	2	8
Resource sharing	2	8
Being accountable to others	1	4
Change of major due to mentoring job	1	4
Drive to do better	1	4
Hands on support with course selection	1	4
No change	1	4
Total	25	100

In the studies by Torres and Hernandez, (2009); Salinitri, (2005); and Good et al. (2000), the researchers found that by being engaged with faculty meant academic success for students. Furthermore, persistence correlated with the satisfaction of faculty engagement in the Torres and Hernandez, (2009)

study. Students who placed higher value on faculty satisfaction did better in feeling a sense of belonging on campus.

Being part of the mentoring program has helped mentors not be intimidated by faculty anymore; 14% said their interactions have changed with faculty (see Table 17). “I am not scared of faculty” said Stephanie (Personal Communication, March 8, 2021). Building confidence in self (10% of the participants) and building relationships with faculty (10% of the participants) made mentors feel comfortable asking the faculty questions on behalf of themselves and as Eric mentioned, “I want to break down barriers for mentees, so I reach out to more faculty” (Personal Communication, December 10, 2020). Vicki talked about her interaction with faculty in regard to getting to know them outside the classroom, and how difficult those interactions were now due to COVID-19, so she makes sure to turn on her camera while on zoom in class because she believes COVID -19 has hindered interpersonal communication.

Table 17. Interactions with the Faculty Change, If at All, as a Result of Being a Mentor

	<i>n</i>	%
Not intimidated anymore	3	14
Building confidence in self	2	10
Building relationships with faculty	2	10
COVID hindering interpersonal communication	2	10
Willingness to attend office hours	2	10
Breaks down barriers on behalf of mentees	1	5
Building relationships with staff	1	5
Connecting with resources on campus library	1	5
Learned effective communication skills	1	5
No change	1	5

Role model awareness	1	5
Sense of belonging	1	5
Thinking about grad school	1	5
Willing to ask for support from others	1	5
Willing to seek relationships instead of waiting for them to come	1	5
* % to total may not add to 100% due to rounding	Total	21
		100*

Peer mentors are seen as motivators for mentees by guided students through the system of higher education (Colvin & Ashman, 2010) or mentees see their mentors as learning coaches. In another study by Morales (2009), mentees felt that their mentors could validate their experiences as first-generation students making the mentees do better in courses. The motivation tends to be towards mentees from mentors (Colvin & Ashman, 2010; Morales, 2009) but this study illustrates that the mentors get motivation from their mentee too.

Twenty-five percent of the participants saw no change in their pace of finishing their college degree (see Table 18) due to their participation in mentoring program. The accessibility to know what courses were needed to graduate was helpful. Maria said, “I am able to plan my college courses and finish on time” (Personal Communication, February 11, 2021). Motivation and drive were themes that mentors talked about, Lily stated she had motivation and drive to get through her classes; “this is doable, this is something I can do” is something she would say as she progressed through her courses (Personal communication, March 5, 2021).

Table 18. Impact the Pace of Finishing Your College Degree

	<i>n</i>	%
No change	3	25
Hands on support with course selection	2	17
Building confidence in self	1	8
Change of major due to mentoring job	1	8
Connecting with resources on campus Advising	1	8
Desire to give back to community	1	8
Drive to do better	1	8
Hands on support with financial aid applications	1	8
Motivation for self	1	8
* % to total may not add to 100% due to rounding	Total 12	100*

A benefit of peer mentoring programs is the personal growth of the mentee and the mentor (Salinitri, 2005; Good et al. 2000). These types of relationships (mentee/mentor), provide interpersonal growth development where the mentor is more confident in themselves. Furthermore, the mentors in the Good et al. (2000) study gained confidence in their leadership skills as well.

Maria talked about her boost in confidence saying, “I am capable of more than what I thought I was capable of” (Personal Communication, February 11, 2021). Twenty-one percent of the participants felt the same way as Maria (see Table 19). A similar sentiment was shared by Jen, who stated, “I can do a lot if I set my mind to it” (Personal Communication, December 16, 2020). Christy and Maria became aware that the mental wellness of themselves and others was valuable; they talked about balancing taking care of themselves and others. Maria spoke about the program connecting her with people who are like minded and want to support others.

Table 19. Learned About Yourself as A Result Of Your Participation in the Mentoring Program?

	<i>n</i>	%
Building confidence in self	5	21
Benefits of job training	2	8
Building relationships with mentors	2	8
Increased ability to time manage	2	8
Increased mental health awareness of self	2	8
Self-awareness	2	8
Ability to balance multiple tasks	1	4
Awareness of research opportunities	1	4
Change of mindset	1	4
Increased job duties/responsibilities	1	4
Learned effective communication skills	1	4
Mentor program is a support system	1	4
Motivator for students	1	4
Strong woman	1	4
Willing to ask for support from others	1	4
* % to total may not add to 100% due to rounding	Total 24	100*

Overall, being part of a mentoring program impacts mentors' persistence when it comes to managing their time better, due to job training meant for mentors to support mentees, but in turn has taught mentors how to be better students. The trainings on study habits also made an impact on their college completion time even though the mentors were initially on time to finish their degree in 4-years. These mentors are building a network of support for themselves and their mentees, which is why relationships are important for them. Mentors connect with fellow mentors, mentees, staff and even faculty making themselves role models for these mentees and in some cases, for the families of the mentors. Finally, confidence building is a byproduct of these types of

programs, where students feel empowered to create a space for themselves and for mentees to be successful.

## Research Question 2: Self-Efficacy

### Qualitative Interview Data

Through mentor/mentee relationships, the positive outcome of contributing to the skills of the mentee helps the mentor feel more confident about their own skills (Bandura, 1977). Self-efficacy functions as a way for mentors to feel engaged and involved in their college experience by working with others who need their support to be successful. Self-efficacy is the foundation on which student success is built (Tinto, 2017) as well as a building block towards persistence (Hu & Ma, 2010).

Connecting with campus resources was an opportunity that 21% of mentors took advantage of as active participants in the mentoring program (see Table 20). In addition, participating in leadership opportunities was an opportunity in which 17% of the participants took advantage. Lily and Wendy indicated they (along with other coworkers) currently plan a summer program for incoming first year students. They want incoming students to feel comfortable and connected to the university and its resources. Thirteen percent of the participants regularly attend campus events and participate in them in order to learn about university resources and share their experiences with mentees.

Table 20. Opportunities You Might Not Have Had

	<i>n</i>	%
Connecting with campus resources	5	21
Leadership opportunities in campus organizations	4	17
Being active/attending campus events	3	13
Being aware of research opportunities	2	8
Increased job responsibilities	2	8
Being accountable to others	1	4
Being aware of other job opportunities	1	4
Connecting with professors	1	4
Increased self-awareness	1	4
Learning effective communication skills	1	4
Professional development opportunities	1	4
Sense of belonging	1	4
Study abroad opportunity	1	4
* % to total may not add to 100% due to rounding	Total 24	100*

Pike and Kuh (2005) used the College Student Experiences Questionnaire to examine the experiences of college students and they found that female minority students wanted to continue their education past their baccalaureate degree. The participants in this study, mostly females, had plans to continue onto graduate school; not all because of the mentoring program, but because they saw the importance of obtaining a higher degree.

Continuing their education was important to 60% of the mentors who participated in the study (see Table 21). Eric, Jen, Maria, and Wendy saw a correlation between their mentor duties of working one-on-one with their students as part of the reason why graduate school was in their future. Jen said, “I want to pursue a masters in counseling because I love to work with and guide students, most students are first-generation and they don’t know about campus resources”

(Personal Communication, December 16, 2020). Surprisingly, twenty percent, of the participants indicated they have been “on task” thinking about graduate school but not because of the mentoring program (see Table 21).

Table 21. Role Mentoring Played in Planning to Go to Graduate School

	<i>n</i>	%
Now thinking about attending graduate school	6	60
No role	2	20
Change major	1	10
Now thinking about going on for Ph.D.	1	10
Total	10	100

#### Quantitative Interview Data

Participants were asked questions about their perceived self-efficacy in a post hoc retrospective pre and post oral survey. The before and after questions measured their perceptions of their self-efficacy before they served as a mentor and after they served as a mentor (see Table 22).

Table 22. Self-Efficacy Before and After Serving as a Mentor Means

	<b>Before Mean</b>	<b>After Mean</b>	<b>Difference</b>
Belief I would be able to achieve most of the goals that I have set for myself	2.6	3.6	1
When facing difficult tasks, I was certain that I would accomplish them	2.7	3.6	0.9
Belief that I would be able to successfully overcome many challenges	2.5	3.7	1.2

I thought I could obtain outcomes that are important to me	2.7	3.8	1.1
Belief that I could succeed at almost any endeavor to which I set my mind	2.2	3.7	1.5
I was confident that I could perform effectively on many different tasks	1.9	3.8	1.9
I believed that compared to other people, I could do most tasks very well	2.5	3.6	1.1
I believed that even when things were tough, I could perform quite well	2.6	3.3	0.7

While the sample was too small for the statistical tests to be generalizable, it does show this was a positive change in participants' perception and demonstrate their increased self-efficacy as a result of participating in the mentor program.

The mindset of these mentors has changed since they started their college careers, most of them want to pursue higher degrees in order to continue helping others. Tinto (2017) stated that a fixed mindset will not increase self-efficacy, and these participants displayed a growth mindset. Some of the participants talked about research opportunities they have been a part of due to their involvement in the mentoring program, which benefit them when they attend graduate school. These mentors are taking advantage of leadership opportunities, thereby, cementing their involvement at the university and building their self-efficacy. Self-efficacy functions as a way for mentors to feel engaged

and involved in their college experience by working with others who need their support to be successful (Tinto, 2017).

### Research Question 3: Social Capital

#### Qualitative Interview Data

Social capital is the culmination of resources that are related to a network of relationships (Bourdieu, 2001). The way mentors have access to these resources and how they build social capital for their community depends on the experiences they have during their participation as mentors. However, the mentor program did not contribute to building social capital in the ways expected; the participants reflected more on personal growth as opposed to contributing to the social capital of their social groups.

The unexpected benefits related to building social capital of mentors ranged from building a network to application fee waivers for grad school, but nonetheless, these mentors gained extra skills as part of their job as mentors. Gaining personal skills like confidence, computer skills and communication skills are the top benefits for these mentors (see Table 22). Karla stated, “That feeling that I am doing all these tasks and that I am achieving that, I know it is going to be a good outcome in the end...more of an advantage for me” (Personal Communication, March 5, 2021) and was an unexpected benefit in her confidence. Further, wanting to build a network for their mentees was something they also gained as a member of the mentoring program.

Table 23. Unexpected Benefits

	<i>n</i>	%
Building a network of support for self and others	2	12
Building confidence in self	2	12
Improved computer skills due to COVID	2	12
Learned effective communication skills	2	12
Ability to get letters of rec	1	6
Access to fellowships	1	6
Building relationships with mentees	1	6
Building relationships with mentors	1	6
Developed better study habits	1	6
Develop professional development	1	6
Grad school application fee waiver	1	6
Leadership positions in other campus organizations	1	6
Self-Awareness	1	6
* % to total may not add to 100% due to rounding	Total 17	100*

Due to the pandemic, mentors did not have the ability to volunteer their time more thoroughly building social capital, instead they took on more job responsibilities or other jobs on campus. Others (6%) were willing to talk to faculty about research opportunities (see Table 23), which is why contributions to social capital were not reflected in this section as expected and were more reflective on self and supporting their peers in the program.

Table 24. Participate In New Community Activities or Volunteer Your Time More

	<i>n</i>	%
Career advancement	2	13
COVID hindering volunteer opportunities	2	13
Access to conferences	1	6
Awareness of other jobs on campus	1	6
Awareness of research opportunities	1	6
Building relationships with mentees	1	6
Desire to give back to community	1	6
Hands on support with financial aid applications	1	6
Increased job duties/responsibilities	1	6
Leadership positions in other campus organizations	1	6
No change	1	6
* % to total may not add to 100% due to rounding	Total 13	100*

Personal development changed the mentors who participated in this study, Table 24 shows that 28% of the participants had an increased compassion for others. Stephanie and Wendy both mentioned they are more empathic towards their mentees; “I am not as judgmental anymore” said Stephanie (Personal Communication, March 8, 2021). Isabel has changed her mind set and wants to motivate her students and her own children to continue their education, which is an indicator of building social capital for others. Karla talked about holding herself to a higher standard now that she is a mentor and leader on campus.

Table 25. Thinking Changed In Any Way Because Of Your Interaction With Your Mentees? (Your Involvement In The Program?)

	<i>n</i>	%
Increased compassion for others	5	28
Change of mindset	3	17
Self-Awareness	3	17
Building confidence in self	2	11
Being accountable to others	1	6
COVID hindering interpersonal communication	1	6
Increased Mental Health awareness of self	1	6
Learning about setting boundaries	1	6
Witnessing mentees develop	1	6
* % to total may not add to 100% due to rounding	Total 18	100*

#### Quantitative Interview Data

Participants were asked questions about their perceived social capital in a post hoc, pre and posttest oral survey. The before and after post hoc questions measured their perceptions of their contributions to building social capital before they served as a mentor and after they served as a mentor (see Table 26).

While the sample was too small for the statistical tests to be generalizable, it does show this was a positive change in participants' perception and demonstrate their perceived increased social capital as a result of participating in the mentor program.

Table 26. Social Capital Before and After Serving as a Mentor Means

	<b>Before Mean</b>	<b>After Mean</b>	<b>Difference</b>

How often did you talk to your friends or family about current events?	1.9	3.2	1.3
How often did you talk to your friends and family about social issues such as peace, justice, human rights, equality, race relations?	2.2	3.5	1.3
How often did you talk to your friends and family about the arts (painting, poetry, theatrical productions, dance, Symphony, movies etc.?)	2	3	1
How often did you talk to your friends and family about different lifestyles, customs, and religions?	2.6	3.5	0.9
How often did you talk to your friends and family about social, and ethical issues related to science and technology such as energy, pollution, chemicals, genetics, military use?	1.7	2.9	1.2
How often did you talk to your friends or family about the economy (employment, wealth, poverty, debt, trade etc.)?	2.1	3.2	1.1
How often did you talk to your friends and family about the cost of college and how they might be able to pay for it?	2.7	3.5	0.8
How often did you talk to your friends and family about how to go about applying for college?	2.1	3.5	1.4
How often did you talk to your friends and family about coursework that needed to be completed to be successful in college?	2.4	3.9	1.5

How often did you talk with your friends, siblings, or others about why one should go to college?	2.8	3.7	0.9
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Overall, the building social capital by mentors increased by taking part in the mentoring programs. Bourdieu (1986) mentioned that overtime capital can accumulate and can produce profit and some of the mentors saw the mentoring job (Table 24). Due to the pandemic, however, participating in volunteer activities was not possible. Participating in a mentoring program had a significant importance in both the self-efficacy and social capital of mentors.

Growing social capital by increased promoting educational opportunities to family or friends by promoting good study habits while in school, about the college application process and about increased awareness of social issues.

### Summary

The data from this study found that mentors benefit from their relationship with mentees, other mentors, and their supervisor in various ways. The persistence of mentors is impacted by their involvement with their mentees. Mentors feel they are role models for incoming students, who are mostly first-generation students. Even though, the quantitative data on self-efficacy and social capital is not generalizable because of the small sample, there was a positive change in their perceptions after their participation in the mentoring program.

## CHAPTER FIVE

### RECOMMENDATIONS AND CONCLUSIONS

This chapter includes an overview of the study, recommendations for educational leaders, next steps for educational reform, recommendations for future research, limitations of study, and a conclusion.

#### Overview

This mixed-methods study examined the experiences of peer mentors who identified as first-generation and attended a four-year public university in Southern California. The study explored the self-reflection peer mentors have about their experiences as mentors in the areas of persistence to complete their college studies, their self-efficacy, and the ways in which they built social capital for others. All of the mentors who participated in the study were mentors for at least two years, nine were undergraduates, and one was a graduate student and alumni of the mentoring program.

The research questions that guided the research through in-depth interviews with mentors were:

1. What are the benefits of participating as a peer mentor at a university have on the peer mentor's persistence in their college education and are they on track to graduate on time?
2. In what ways does participating in a peer mentoring program as a peer mentor have on that individual's self-efficacy?

3. In what ways does participating in a university's peer mentoring program as a peer mentor assist in building social capital for their community?

Participants shared their experiences with their persistence of how they maneuvered through higher education (Hu & Ma, 2010; Tinto, 2017; Kuh, 2009), their own drive to work or self-efficacy to complete a task (Bandura, 1977; Tinto, 2017; Wang, 2012), and building social capital for their communities (Bourdieu 1986; Shiera et al., 2018 Morales, 2009, Morales et al. 2016, and Hezelett & Gibson, 2007).

The mixed-methods design was used in-depth interviews, which consisted of questions about the mentors' demographics, persistence, self-efficacy, and social capital along with a retrospective pretest and posttest set of questions about their self-efficacy and social capital. These questions were used to explain how the participants viewed their experiences as mentors and how, if at all, the experiences impacted their persistence, self-efficacy, and their contributions to social capital.

### Recommendations for Educational Leaders

As a result of this study educational leaders should build and maintain mentoring programs to increase persistence, build self-efficacy of mentors and build social capital with the families and friends of mentors. With the CSU system graduation initiative of having a 30% four-year graduation rate by 2025, educational leaders should focus on programs and resources that support retention. This study found participating as a mentor positively impacts retention

(persistence). The findings from this study were consistent with the literature reviewed. First-generation students in this study valued personal connection (e.g., with faculty members and mentees) more than networks, which directly supports persistence. Similarly, to Ishiyama, (2007); Mekolichick and Gibbs (2010) also found that to be the case in their studies. Especially when it came to sharing knowledge with mentees, mentors found that information sharing more valuable as well as their contacts with faculty members.

#### Persistence Recommendation

During the interviews, participants indicated that being a mentor assisted them in completing their program of study. As a result, educators should invest more funding into mentoring programs to increase the attendance of mentors in graduate programs as well as to increase their sense of belonging. Educational leaders should invest funds in mentoring programs to support these students to continue their education; sixty percent of the participants in this study were previous mentees who were inspired and motivated by their mentors to become mentors, which affirms that mentors are the best advocates for the resources the university has to offer. One example came from one participant, Jen who said, “I wanted to emulate my mentor and help others” (Personal Communication, December 16, 2020). It appeared from this study that mentors are the universities best advocate while in college with their peers in encouraging college completion.

A component of persistence was resource sharing and learning new skills. Mentors were trained in time management so they could guide mentees through the process, but in the end, the participants used that skill for their own studying. That finding aligns with the study by Salinitri (2005) where mentors would share university resources as well as time management skills and ways to improve academic performance with their mentees, which ultimately lead to better grades for the mentees. Along with better study habits, participants found they were less intimidated by faculty; “I am not scared of faculty” said Stephanie (Personal Communication, March 8, 2021). The Torres and Hernandez, (2009) study also found that faculty satisfaction was an indicator of persistence among students because participants believed they had a good relationship with their instructors, as did the participants in this study.

The college experience of a mentor is an experience mentors can take into their communities while talking with others, as a result, these mentors become advocates and vital recruitment tools to support the university and encourage incoming students about what to expect and have to present. If educational leaders fund more trainings where mentors feel confident about sharing their unexpected benefits to peer and perspective students, it is likely more students would participate in mentoring programs both as mentees and mentors. Peer-to-peer contact as well as more individual contact with faculty will build the self-efficacy of mentors and in addition, may help build social capital for their communities in the Inland Empire.

### Self-Efficacy Recommendation

During the interviews, participants indicated that their professional development was an important part of their development. As a result, educational leaders should invest funds for staff who manage these mentoring programs on campus so they can host more professional development activities for mentor participants. Mentors need to be told, via professional trainings, that what they are doing as mentors will contribute to their own success and may ultimately have a positive impact in their communities. Part of the self-efficacy of these participants centered on leadership, confidence, determination and resistance. Good et al. (2000) found that 90% of mentors developed better communication skills, confidence, leadership skills, and identity. The pretest and posttest data showed that the self-efficacy of students increased significantly with the small sample of participants. Jen summarized her perception of her self-efficacy by saying, "I can do a lot if I set my mind to it" (Personal Communication, December 16, 2020).

Salinitri (2005) and Good et al. (2000) found that the academic development and the success of mentors was a benefit to mentors who participated in a mentoring program because it helped them understand they could accomplish things they might not think they could accomplish. Additionally, Salinitri (2005) found that relationships were important for mentors and mentees alike, that study stated that the main benefits that emerged from mentor/mentee relationships were; first, the peer mentors were able to support mentees, second,

the peer mentors were able to apply mentoring concepts to their own life (i.e., building their self-confidence), and third, participants were able to connect with each other. The findings align with the findings in the current study that the participants wanted to build a network of support for themselves and others along with enhancing their connection to other mentors, and professional staff. These relationships were important to some participants who in particular needed extra connectedness during the pandemic. Eric talked about how he valued talking to other mentors and sharing different tactics when it came to working with students.

Sixty percent of the participants in this study talked about attending graduate school as part of their educational journey due to their involvement in the mentoring program. Six of the 10 participants started as mentees, they heard messages from their mentors about graduate school, and now as mentors, they share those messages with current mentees. The Wang (2012) study found that memorable messages to students support their self-efficacy, in particular messages about: 1) pursuing academic success; 2) valuing schools; 3) increasing future potential; 4) making decisions; and 5) support and encouragement.

#### Social Capital Recommendation

A recommendation for building social capital for the mentor's communities is more difficult for educational leaders because the mentors who participated in this study were unaware or restrained from talking about their successes and

how they shared their experiences with the community. After the interview ended and the recording stopped, several participants mentioned they felt uneasy about bragging about their perceived benefits. Therefore, trainings for mentors to understand that their skills, abilities and knowledge are also going to be helping their communities build social capital for others might be useful to contribute to the social capital in their families and communities.

The personal reflection captured in this study pointed more toward self-awareness than to building social capital. Several of the participants talked about their ability to be able to put themselves in a vulnerable position and being more empathetic towards their students by putting themselves “out there” (Colvin & Ashman, 2010). Stephane and Wendy both talked about being more understanding of students, “I feel like I really learned how to be empathetic” (Personal Communication, March 11, 2021) said Wendy.

### Next Steps for Educational Reform

Based on the results of this study, education practitioners should consider mentors as an extension of staff in order to enhance staff's connections with students. Extending mentors as staff could create a pathway for administrators to connect with more students in order to encourage them to be more engaged with the university. For example, several of the participants felt a sense of ownership to the title “peer mentor” and they felt responsible to share their knowledge with their mentees. Staff do not always have that same sense of

responsibility towards students and advising to students and the access mentors have with the student body could be a useful resource to staff and administration.

When recruiting new students to join the mentoring team, sharing information about the unexpected benefits members gained would be helpful to entice potential mentors. For example, building a network of support for the mentor and mentees to connect with resources would be beneficial to both the students and the campus. In addition, the students and they would be facilitating connections between faculty and mentors would also provide a positive outcome for mentors. Further, participation as a mentor can also help mentors navigate the system of higher education, which can be daunting to some first-generation students. Promoting self-development as a perk of being a mentor would also help mentoring programs recruit students who might not been aware that professional development is an important part of a college education.

Finally, practitioners should expand self-reflection training for mentors. Even though most of the participants had more confidence and felt like role models, several of them were taken aback when asked if the term “role model” applied to them. The first thing Wendy said, “that is too much pressure” (Personal Communication, March 11, 2021) but ultimately, she said she did feel like a role model for her mentees. If these mentors had more trainings on self-awareness and ownership of their success, they could use that skills for jobs after college. As a result, the university would be graduating emotionally intelligent students who could build the social capital of others in their communities.

## Recommendations for Future Research

Based on the findings from this study, the following should be considered for future research. As a result of the persistence findings it may be beneficial to focus on one mentoring program as a case study, where the researcher focuses on the content of the trainings, and observations of staff and mentor meetings. Additionally, mentors could keep a reflection journal as a part of a study where each week a reflective question is asked about their experience that week. For the journal, the researcher would prompt the mentors with various questions about persistence, self-efficacy, and social capital. In that way the mentors might have time to reflect on what they are gaining as mentors.

Additionally, the researcher might include interviews of the mentees to ask about their perception of mentors related to the research questions being examined. This process might validate more clearly its responses of the mentors.

Based on this study, mentors gained confidence and strived to motivate their mentees, therefore a future study in which the researcher refined what motivates or energizes someone to mentor others would be beneficial. The benefit of their research would be an understanding if in fact mentors do motivate or energize mentees and if so, how that happens.

Lastly, understanding the experiences of mentors who are second-generation college students could also be useful for future research. It would be interesting to see what unexpected benefits second-generation students gained compared to first generation students, Pike and Kuh (2005) noted that first and

second-generation students differ in characteristics, college experience and learning outcomes. By interviewing mentors from both generations, researchers could examine the difference and how-to best support both as mentors in their programs.

### Limitations of the Study

Conducting the study during a pandemic was a limitation of this study because there were a limited number of mentors who agreed to participate, as a result, generalizing the findings is not possible. Related to this limitation is the prospect that saturation of the data was not realized.

Face-to-face interviews with mentors would be useful in post pandemic times because it would be more personable for the mentors and researcher and would have allowed for more visualization of body language during the interview. Also, asking more open-ended questions about social capital before the retrospective pretest and posttest section may have provided some guidance to mentors into a mindset of building social capital for others in their community as opposed to making that section about self-reflection.

Another limitation of the study was using the registrar's statistical data to triangulate the qualitative interview data. While verification of the years at the university was reviewed, grades were not used because during the last year students were able to use the Cr/NC option in lieu of letter grades making this process not a viable option for the triangulation of data.

In addition, trying to make contact of mentors to participate was difficult due to the pandemic. And as a result, participants were not forthcoming in offering to participate and it took multiple outreaches to obtain the sample, which meant the sample may have been more biased.

Due to the selection process of participants, no negative comments about serving as mentor were identified. This lack of negative comments may have been a bias on the part of the participants who may have wanted to please the interviewer with their comments.

### Conclusion

The purpose of this study was to understand the benefits first-generation mentors gain from their participation in a mentoring program at a public four-year university. In particular, how their involvement as mentors impacted their persistence, self-efficacy, and building social capital. The need for this study centered on retention, college graduation, and contribution to their communities based on their involvement in the mentoring program.

Findings from this study showed that mentors gained benefits from mentoring relationships too, not just mentees. Mentors can also assist in validating the work practitioners currently do to develop their mentors in a professional environment. The motivation of first-generation students who serve as mentors is largely around the relationships they build with their colleagues and peers. In addition, the study found, these mentors are also able to connect more

easily with staff and faculty at the university and they have more confidence in their abilities to work with their mentees.

APPENDIX A:  
INSTITUTIONAL REVIEW BOARD APPROVAL



December 8, 2020

**CSUSB INSTITUTIONAL REVIEW BOARD**

Expedited Review  
IRB-FY2021-131  
Status: Approved

Prof. Sharon Brown-Welty and Ms. Avisinia Rodriguez  
Palm Desert Campus  
California State University, San Bernardino  
5500 University Parkway  
San Bernardino, California 92407

Dear Prof. Brown-Welty and Ms. Rodriguez:

Your application to use human subjects, titled "Mentor experiences" has been reviewed and reviewed and approved by the Institutional Review Board (IRB) of CSU, San Bernardino. The CSUSB IRB has not evaluated your proposal for scientific merit, except to weigh the risk and benefits of the study except to ensure the protection of human participants. Important Note: This approval notice does not replace any departmental or additional campus approvals which may be required including access to CSUSB campus facilities and affiliate campuses due to the COVID-19 pandemic. Visit the Office of Academic Research website for more information at <https://www.csusb.edu/academic-research>.

The study is approved as of December 8, 2020. The study will require an annual administrative check-in (annual report) on the current status of the study on December 8, 2021. Please use the renewal form to complete the annual report.

If your study is closed to enrollment, the data has been de-identified, and you're only analyzing the data - you may close the study by submitting the Closure Application Form through the Cayuse IRB system. Please note the Cayuse IRB system will notify you when your protocol is due for renewal. Ensure you file your protocol renewal and continuing review form through the Cayuse IRB system to

keep your protocol current and active unless you have completed your study. Please note a lapse in your approval may result in your not being able to use the data collected during the lapse in your approval.

You are required to notify the IRB of the following as mandated by the Office of Human Research Protections (OHRP) federal regulations 45 CFR 46 and CSUSB IRB policy. The forms (modification, renewal, unanticipated/adverse event, study closure) are located in the Cayuse IRB System with instructions provided on the IRB Applications, Forms, and Submission Webpage. Failure to notify the IRB of the following requirements may result in disciplinary action.

- Ensure your CITI Human Subjects Training is kept up-to-date and current throughout the study.
- Submit a protocol modification (change) if any changes (no matter how minor) are proposed in your study for review and approval by the IRB before being implementing in your study.
- Notify the IRB within 5 days of any unanticipated or adverse events experienced by subjects during your research.
- Submit a study closure through the Cayuse IRB submission system once your study has ended.

The CSUSB IRB has not evaluated your proposal for scientific merit, except to weigh the risks and benefits to the human participants in your IRB application. If you have any questions about the IRBs decision please contact Michael Gillespie, the IRB Compliance Officer. Mr. Michael Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at [mgillesp@csusb.edu](mailto:mgillesp@csusb.edu). Please include your application approval number IRB-FY2021-131 in all correspondence. Any complaints you receive regarding your research from participants or others should be directed to Mr. Gillespie.

Best of luck with your research.

Sincerely,

*Nicole Dabbs*

Nicole Dabbs, Ph.D., IRB Chair  
CSUSB Institutional Review Board

ND/MG

APPENDIX B:  
RECRUITMENT MATERIAL

# PARTICIPANTS NEEDED FOR A RESEARCH STUDY

- Have you participated in a mentoring program for at least two years?
- Do you live in the Inland Empire?
- Are you a first-generation college student?



participants eligible  
for \$10 gift card

**CONTACT: AVISINIA (AVI) RODRIGUEZ**



**[ARODRIGU@CSUSB.EDU](mailto:ARODRIGU@CSUSB.EDU)**



**760-587-8564**

THIS STUDY HAS BEEN APPROVED BY THE  
CALIFORNIA STATE UNIVERSITY, SAN  
BERNARDINO INSTITUTIONAL REVIEW BOARD

APPENDIX C:  
INFORMED CONSENT

## INFORMED CONSENT

### The impact of the mentor experience at a public 4-year university

**PURPOSE:** Avisinia (Avi) Rodriguez, Doctoral candidate in educational leadership at California State University, San Bernardino, invites you to participate in a research study. This study's purpose is to explore the self-perception peer mentors have about how they were impacted in the area of persistence to obtain their degree, their self-efficacy, and the ways in which they build social capital for others.

Expected results include the understanding of the experiences of current and former mentors on how the mentoring program has impacted their success.

**DESCRIPTION:** I would like to ask you to participate in an interview via Zoom. Your participation will require approximately 30 to 45 minutes and the day and time will be scheduled at your convenience. With your permission, all interviews will be recorded.

**PARTICIPATION:** Your participation is entirely voluntary. You do not have to be in this study, and you do not have to answer any questions you do not wish to answer. You may skip or not answer any questions and can freely withdraw from part of the patient at any time. Your participation will not impact your employment, current or future.

**CONFIDENTIAL:** I will do everything to protect your confidentiality. Specifically, your real name will never be used in any dissemination of the work (e.g., articles or presentations). Pseudonyms will be used for the student, campus, college, faculty members etc. All efforts will be used to protect your confidentiality, any data collected will be kept under lock and key and in a password protected computer. The audio recordings will be destroyed three years after the project has ended.

**DURATION:** The extent of your participation would include one interview. The interviews would last approximately 30 to 45 minutes each. Following the interview, you could be contacted via email with follow-up or clarifying questions. Such an exchange would require no more than 10 minutes of your time. Following the interview, you will receive a transcript of the interview, along with a scanned PDF of the signed consent form. All participants will be granted the opportunity to review their transcript, confirm, and/or withdraw the transcript from the study.

**RISKS:** I know of no foreseeable risk or discomfort to you by participating in this research study. Your identity, your institution, college, faculty members Will remain confidential. Your participation will not impact your employment, current or future.

**BENEFITS:** Benefits to this study broaden the understanding of the mentor experience therefore building mentoring programs that support mentees as well as mentors. Another benefit may include how to target trainings for mentors based on what they found beneficial beyond their persistence, self-efficacy, and social capital.

**AUDIO/VIDEO:** I understand that this research will be recorded via audio/video. Initials \_\_\_\_\_

**CONTACT:** If you should have any questions regarding this study, please contact Avisinia Rodriguez at [arodrigu@csusb.edu](mailto:arodrigu@csusb.edu) or 760-587-8564. For answers to questions about the research and research subject rights, or in the event of a research related injury please contact Dr. Sharon Brown-Welty, at [sharonb@csusb.edu](mailto:sharonb@csusb.edu) or 909-537-8274. You may also contact CSU San Bernardino's IRB compliance officer, Michael Gillespie, at 909-537-7588 or [mgillesp@csusb.edu](mailto:mgillesp@csusb.edu).

**COMPENSATION:** After the questionnaire has been completed, participants will receive a \$10 Starbucks gift card to their email.

**RESULTS:** This study will be published as part of Avisinia (Avi) Rodriguez's dissertation. Likewise, it may be disseminated through various outlets including conference presentations and publications. Findings will be published online through ScholarWorks, an online institutional repository for California State University, San Bernardino.

**CONFIRMATION STATEMENT:** I have read the above information and agree to participate in your study.

**SIGNATURE:**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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