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Community College Students' Perceptions of the Effects of Peer Mentoring on Their Sense of Belonging

Bryan K. Sullins
University of South Florida

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Community College Students' Perceptions of the Effects of Peer Mentoring
on Their Sense of Belonging

by

Bryan K. Sullins

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in Curriculum and Instruction
with a concentration in Higher Education Administration
Department of Leadership, Policy and Life Long Learning
College of Education
University of South Florida

Major Professor: Amber D. Dumford, Ph.D.
Miller, Thomas, Ed.D.
Ponticell, Judith, Ph.D.
Schneider, Jennifer, Ph.D.

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Dedication

This study is dedicated to my wonderful wife Becky whose not-so-subtle reminders kept me on track and provided the motivation I needed to complete this challenging work. Her endless encouragement and unwavering confidence fueled my efforts, prompting me to push myself harder than ever before.

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Abstract

Community college students are less likely to complete their educational objectives than are students who attend 4-year institutions. Students who opt out of the recommended remedial coursework in the foundational subjects of reading, writing, and math may be further disadvantaged when attempting college level coursework. As one way to reduce this disadvantage, peer mentoring's positive influence on retention, student development, and success in college is well-documented in higher education literature. Additionally, an increasing number of research articles espouse students' sense of belonging as a critical factor in these same areas. What the extant literature fails to closely examine are the ways in which peer mentoring influences the two dimensions of sense of belonging in college—peer belonging and institutional acceptance.

This is a descriptive study designed to explore students' perceptions and experiences surrounding the ways in which the peer mentor relationships affected their sense of belonging in college. Using exemplar methodology, I selected mentees who exhibited at least one of the criteria of well mentored students—students who were mentored in accordance with the college's QEP requirements. The findings in this study suggest sense of belonging was affected by peer mentor interventions. Semi-structured interviews with the well mentored students in this study suggest when peer mentors behaved in accordance with the exemplar criteria, sense of belonging was improved.

With few exceptions, all three participants credited their peer mentors with having influenced their sense of belonging. This study sheds light on the underexplored association

between peer mentoring and sense of belonging. The findings in this study suggest peer mentoring is an effective strategy to influence sense of belonging in the areas of connectedness, engagement, and transition. Peer mentors serve as facilitators of sense of belonging when they bridge academic and social aspects of college life for students whom they mentor. The experience gained in this study may be informative to the design, evaluation, or redesign of peer mentor programs at other higher education institutions.

Chapter 1: Introduction

Peer mentoring's influence on retention, student development, and success in college is well-documented in higher education literature (Andrews & Clark, 2011; Asgari & Carter, 2016; Collings, Swanson, & Watkins, 2014; Holt & Fifer, 2016; Yomtov, Plunkett, Efrat, & Marin, 2017). As a result, peer mentoring programs are employed at many postsecondary institutions and are viewed as an indispensable feature of effective transition programs (Egege & Kutieleh, 2015). Also, an increasing number of research articles espouse students' sense of belonging as a critical factor in retention, student development, and success in college (Berger & Milem, 1999; Hausmann, Schofield, & Woods, 2007; Hoffman, Richmond, Morrow, & Salamone, 2002; Ribera, Miller, & Dumford, 2017). What the extant literature fails to closely examine are the ways in which peer mentoring influences the two dimensions of sense of belonging in college—peer belonging and institutional acceptance (Ribera et al., 2017; Strayhorn, 2008). This is a qualitative study at a large West Central Florida community college investigating the influence of peer mentoring on students' sense of belonging.

According to the National Student Clearinghouse Research Center's (NSCRC) 2017 report, approximately 51% of community college students did not return to the same institution for their sophomore year. In recent years, scholars, student development theorists, and higher education leaders have begun to recognize connections between peer mentoring and student success and retention. Studies suggest that peer mentor programs result in positive outcomes for college students. In a study by Asgari & Carter (2016), 62% of students sampled from two introductory psychology classes indicated that a peer mentor encouraged them to study more.

Compared to non-mentored students, most participants in the study also reported confidence in their own ability to do well and motivation to succeed as resultant from their relationship with a mentor. Armed with greater understanding of ways in which peer mentoring influences the development of college students, we can better evaluate the effectiveness of peer mentor programs, identify students at risk, and design effective interventions.

One of the foundational models exploring students' decisions to depart was developed by Vincent Tinto (1987, 1993). Tinto's model of student persistence emphasized student perceptions of social and academic integration as fundamental to their likelihood of remaining enrolled in college. Tinto demonstrated that the more integrated in the college community that students become, the less likely they are to withdraw, thereby implicating sense of belonging as a predictor of student persistence. Other scholarly research supports Tinto's idea. In a study designed to investigate the role of students' sense of belonging to their university in college student retention, sense of belonging was positively associated with institutional commitment and intentions to persist at the start of the academic year (Hausmann, Schofield, & Woods, 2007). Additionally, Terrell Strayhorn (2012) found that the quality of interactions that students experience in the college setting—with faculty, staff members, and peers—are pivotal to a student's ability to establish meaningful relationships. These collegiate relationships can strengthen students' commitments, connections, and consequently, retention (Strayhorn, 2012). One intervention that may nurture these feelings in college freshmen is a relationship with an experienced peer—peer mentoring. Common college student populations that benefit from mentoring by peers include freshmen, transfer students, and international students. For this study I examined a group of community college students for whom remedial instruction was

recommended, declined to accept remediation, and entered a support program which included a peer mentoring component.

Remediation in the State of Florida

When entering college for the first time, some students are ill prepared for the academic rigor of college level course work. It is widely acknowledged that some freshmen students lack adequate academic skills, need to fill gaps in their learning from secondary school, and require remediation in one or more subject areas to improve their chance of success in college classes. Colleges facilitate such remediation through developmental courses, which do not give college credit, designed to help students gain proficiency in basic subjects. On a state level, pursuant to Senate Bill 1720 (2013), colleges and universities in Florida are required to offer developmental education options for students who need remediation in reading, writing, and math. College personnel must advise students whose test scores indicate the need for developmental education of their choices with regard to enrollment in developmental education classes. To place a student into the proper course levels, college personnel must acquire supporting data to determine the student's level of mastery in reading, writing, and math. Supporting data can come from a variety of sources—most commonly, test scores from high school Advanced Placement (AP) examinations, Scholastic Aptitude Test (SAT), American College Testing (ACT), and the common placement test, known in Florida as the Postsecondary Education Readiness Test (PERT). Advanced placement courses offer students the opportunity to complete college-level work on specific subjects while still in high school and earn college credit and placement. The AP examination is the culminating test that is administered to a high school student upon completion of an AP course. The resulting test scores are used to determine whether the student has earned college credit for the course, and therefore placement in college

level courses. The SAT and ACT are entrance examinations used by colleges and universities to make admissions decisions. The purpose of these examinations is to measure a high school student's readiness for college and, for selective colleges and universities, provide common data points that can be used to compare applicants. Open access institutions such as community colleges can use the scores from SAT and ACT examinations for placement. The PERT is Florida's common placement test, which is administered to students in public high schools and Florida College System (FCS) institutions. As the test's namesake implies, PERT scores can be used to determine a student's readiness for postsecondary education and appropriate course placement. Although SAT, ACT, and PERT scores never expire, FCS colleges set individual institutional policies regarding the length of time the scores are considered valid. The institution adopted a two-year validity period, whereby scores of any kind that are used for college placement must be less than two years old.

Some students are compelled to take the PERT examination and, if their scores do not meet the measure to place them into college level courses, they are required to enroll in developmental classes. These are students who have no test scores or academic records (SAT, ACT, AP, PERT, or other) that can be used as a measure of their ability to succeed in college level courses. In FCS colleges, common examples of students who are compelled to take the PERT assessment are students who do not submit qualifying ACT, SAT, or AP scores and are private high school graduates, home-schooled graduates, out-of-state high school graduates, or earned a general education diploma (GED) high school equivalency certificate. Depending on the student's subsequent PERT placement scores, developmental (pre-college level) courses may be required in one, two, or all three subject areas—reading, writing, and math. Students are

placed in developmental courses within these subject areas and in the appropriate levels:

developmental one, developmental two, and a combination of developmental one and two.

In some cases, students have the right to opt out of taking the PERT examination, as well as developmental classes. The Florida State Senate specifies two groups of students who qualify for this flexible placement and may not be compelled to take the PERT examination, or to enroll in developmental education classes. These are students who entered 9th grade in a Florida public school in 2003-2004 or thereafter and who earned a standard Florida public high school diploma, or students who are serving as active duty members of the United States Armed Services. Even after taking the PERT examination and not meeting the college level placement threshold, these students still have the right to opt out of developmental courses. Students who opt out of taking recommended developmental education classes are referred to as flexible opt-out students. These students may be disadvantaged by the gaps in foundational knowledge in reading, writing, and math and therefore require additional support in college-level classes. Some HEIs have implemented programs and interventions to meet the needs of flexible opt-out students.

The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC), the regional body for the accreditation of degree granting HEIs in the Southern states, requires each institution to develop, implement, and maintain a Quality Enhancement Plan (SACSCOC, 2018). The QEP is a ten-year commitment made by the institution that includes a process of identifying key issues focused on student learning outcomes and the mission of the institution. Broad-based involvement of institutional constituencies in the development and implementation of the QEP is required, as well as the clear identification of goals and a plan to assess their achievement.

A large community college in West Central Florida designed and implemented a QEP to respond the needs of flexible opt-out students. These students receive extra support from faculty mentors, success coaches, and peer mentors. It is the peer mentor component of the QEP that serves as the focal point for my research. Peer mentoring has shown to improve students' psychological and emotional support (Gunn, Lee, & Steed, 2017) promote involvement (Jacobi, 1991), and lead to additional positive effects such as improved academic performance and retention (Hill & Reddy, 2007; Holt & Fifer, 2016; Kiyama & Luca, 2014). I aim to elucidate the perceptions of mentored students relative to qualities of their relationships with peer mentors and the influence of those relationships on their sense of belonging in the college community.

Problem

Low income students are more likely than middle to high income students to enroll at a community college. The National Center for Education Statistics (NCES) collects information on family income for independent community college students and students dependent on their parents. In 2016, The NCES reported that 37% of community college students earned incomes of less than \$20,000. A nationally representative survey conducted by Berkner & Choy (2008) collected data on first-time college students in 2003–04. This study found that 57% of first time in college (FTIC) students, with family incomes of \$32,000 or less, started at a two-year or less-than-two-year postsecondary institution rather than at a four-year institution (Berkner & Choy, 2008). Apart from the characteristic of lower socioeconomic status (SES), community college students often have children and/or family members to care for, a part-time or full-time job, multiple jobs, lack of independent transportation, and often rely heavily on financial aid resources. Add to these burdens the pressures new students face when making the decision to enter college. The first year of college is a time of transitions and new challenges for students.

This is especially true for community college students who face many significant challenges, which many university students may not. Additionally, once enrolled, students who attend community colleges are less likely to complete their educational objectives than are students who attend 4-year institutions. A 2018 report published by the National Student Clearinghouse Research Center (NSCRC) illuminated first-year college student persistence and retention rates. For students who started college in fall 2017 at two-year public institutions, the persistence/retention rate was 62.3%, compared to 82.7% at four-year public institutions.

Flexible opt-out students comprise a vulnerable subgroup, some of whose members face challenges that college-ready students do not. The latter do not have the significant gaps in learning held by many of the former. Students who opt out of the recommended remedial coursework in the foundational subjects of reading, writing, and math may be disadvantaged in these subjects as well as tangential subjects when attempting college level coursework. The college is paying close attention to this often-underrepresented population and the aim of the college's peer mentoring program is to increase retention and completion rates among flexible opt-out students. Research indicates that peer mentoring can provide this vulnerable group of students encouragement and emotional support, reduce stress and anxiety, and strengthen their academic and social networks (Hill & Reddy, 2007; Holt & Fifer, 2016; Kiyama & Luca, 2014).

The college's QEP includes continuous improvement mechanisms such as annual assessment reports, action plans for improvement, action plan follow-up reports, and annual review of results. Each semester, QEP leadership personnel conduct quantitative assessments of participant outcomes through end of semester data analytics. Analysis of these data provides a measure of student achievement for the population of flexible opt-out students participating in the program compared to nonparticipants of the same group. The college's improvement plan

includes an end of course student survey and final reflection to capture mentees' perceptions about the overall course, usefulness of activities, most helpful resources, time commitment, and suggestions for program improvement. There is no mechanism to formally explore mentees' experiences and perceptions, in depth, regarding the influence of the peer mentor relationship on their sense of belonging at the college. Data from the study have the potential to provide useful insights and aid in the continuous improvement of the peer mentor program at the institution and similar programs at other postsecondary institutions.

Purpose of the Study

The purpose of this qualitative study is to explore students' perceptions of how peer mentor relationships affect their sense of belonging. In order to deeply explore those perceptions, it is important to understand the actions that mentored students take in response to peer mentor influence, such as their academic behaviors, attitude shifts, engagement, and involvement in college. Beyond the actions taken by mentees as a result of peer mentoring, it is important to explore mentees' feelings of integration and connectedness within the two dimensions of sense of belonging—peer belonging and institutional acceptance (Ribera et al., 2017; Strayhorn, 2008). By improving understanding of these critical aspects of student success, institutional leaders and program developers can design and implement effective peer mentor programs and evaluate peer mentor interventions relative to their ability to promote student success.

While studies highlight the positive outcomes, which result from peer mentoring practices, there is scant research illuminating mentees' personal experiences and individual perceptions of the influence of peer mentoring relative to their sense of belonging in the college setting. Although some researchers have explored student insights, most offer cursory

acknowledgement of these perceptions. Fewer still address the influence of peer mentoring on students' sense of belonging. I prioritized the student perspective using qualitative research techniques and exploring the perceptions of flexible opt-out student mentees in a peer mentor program at a large community college in West Central Florida. Particularly, I sought to discover in what ways a peer mentoring relationship affects students' feelings of acceptance, connectedness, importance, and value at the college (i.e. sense of belonging).

Student voice is important, necessary, and conspicuously silent in the extant literature. Therefore, a qualitative research design is appropriate for the type of questions I ask, the type of data I collected, and findings that I report. The qualitative data captured in this study includes information about the relationship between mentor and mentee. I gained a nuanced understanding of mentees' experiences, perceptions, opinions, feelings, and beliefs relative to the influence of the peer mentor relationship on their sense of belonging at the college. I explored student mentee perspectives of their mentors' influence on their sense of belonging to evaluate the efficacy of peer mentoring as an intervention to peer belonging and institutional acceptance. The focus of this qualitative study is the peer mentoring component of the learning community. I designed the study to discover the ways in which mentored students perceive mentoring as an influence on their sense of belonging—among their peers and with the institution.

An empathetic ear and supportive relationship from a peer who has faced similar challenges can provide the encouragement students need to persevere and persist when times are tough. Peer mentors can provide critical support to students, aiding in their transition, resulting in higher rates of success in retention and persistence. Using a quantitative-survey, participation, and academic data spanning from 2003 through 2007, Lori Goff's (2011) research suggests that peer mentoring is effective in improving academic achievement. Conducting a benchmarked

factor analysis with 17 institutions, the Hobsons Retention Project (Adams, Banks, Davis, & Dickson, 2010) explored the management of retention and minimizing attrition. Peer mentoring tops their list of intervention and support best practices to enhance the first-year experience. The pervasiveness of peer mentoring strategies used to improve postsecondary student outcomes indicates the considerable consensus in the field regarding their effectiveness to undergird academic and personal student support programs.

Research Question

To achieve the purpose of this qualitative study, I focused on a single broad research question. What are community college students' perceptions of the effect of peer mentoring on their sense of belonging in college? I designed participant interview prompts suitable to encourage participants to provide rich insight to the influence (if any) of peer mentoring on their sense of belonging in college.

Definitions of Terms

Several important terms are defined here to ensure a common understanding of key concepts and terminology, particularly in the case of terms that are not widely known or require context for the basis of this study. Absent these clarifying statements, readers may be left with unclear ideas of how the terms have been operationalized. Clearly defining the terms—flexible opt-out students, peer mentor, and sense of belonging—will improve readers' understanding of these important terms and further aid in contextualizing key concepts.

Flexible opt-out students: College students who have the right to decline, and (1) have declined to take the PERT and developmental courses; (2) took the PERT examination, but declined (opted out) to take developmental courses, even though they received recommendations from the college to do so based upon their PERT examination scores, or; (3) took SAT, ACT, or

AP examinations for which the scores indicate the need for developmental courses, but opted out of taking them.

Peer mentor: There is an abundance of peer mentor descriptors found in mentoring research, but generally, the influential or experienced person who works with mentees is called guide, teacher, tutor, trainer, or mentor. In higher education, when the mentee and the more experienced person are both students, who share experiences, the guiding person is often called a peer mentor. A peer mentor is someone who has a shared or similar experience and guides the relationship with the mentee. Refining the concept and applying it to the context of higher education, often the peers in the mentoring relationship are students having the same or similar experience in coursework or program.

Sense of Belonging: The exact provenance of the idea of belonging in college is unclear, but evidence begins to surface in the literature in 1989 with Schlossberg, Lynch, and Chickering's book, *Improving Higher Education Environments for Adults*. While the book's spotlight focuses on undergraduate adult learners and their special needs, strengths, and weaknesses, Schlossberg et al. prompt readers to consider the import of whether students feel marginal or that they matter. The authors suggest that the polar themes of marginality versus mattering are common to us all in our shared humanity. The application of this theory occurs when we ask ourselves questions about our sense of belonging. Am I a part of things? Do I make a difference? Do others care about me and make me feel like I matter? Do I identify with this or that? Do I belong?

Belonging is a human need that is satisfied when we are accepted or included as a member or participant in something we value. Belonging can be experienced as an emotional response to acceptance, rejection, neglect, exclusion, or being overlooked. Also, it can be

experienced through emotional attachment to a physical location or place. Feelings of belonging affect our feelings of value and self-worth, are part of the human experience, and something we all share. These feelings occur in students as both an overall sense as well as a sense in specific situations or dimensions, such as peer belonging and institutional acceptance. It is the amalgam of these feelings, relative to these various situations and contexts, which form an overall sense of belonging in college students. Two dimensions of belonging discussed in this study are peer belonging and institutional acceptance.

Assumptions

Participant anonymity and confidentiality was preserved. Participants were volunteers who may have withdrawn from the study at any time with no ramifications. Thus, I assume participants answered the interview questions in an honest and candid manner. The inclusion criteria for volunteers are appropriate and therefore assure that the participants were enrolled, registered for the NFS support class, and mentored by a peer. I assumed that participants had a sincere interest in participating in the research and did not have other motives. Additionally, the number of participants was appropriate from which to adequately draw conclusions—data saturation was reached.

Limitations

A limitation of the study is the inability to analyze the influence of peer mentoring on degree completion, due to the fact that the study concluded before students completed their degree requirements. Another limitation is the lack of baseline data with which to compare the mentees' sense of belonging before and after they were mentored.

Delimitations

In this study, I maintained a narrow focus by examining only the perceptions and experiences of the mentees in the mentoring relationship. Studies show that the mentors also perceive benefits (Gunn, Lee, & Steed, 2017; Kiyama and Luca, 2014) but their perceptions lie beyond the scope of this study. The qualitative methodology for this study also served as a delimiting factor. Qualitative design is appropriate for the type of questions I asked, the type of data I collected, and the findings that I report.

Summary

Low persistence/retention rates among community college students are due, at least in part, to their lack of integration within their institution. When students are disengaged, disconnected, do not feel valued, have not developed meaningful collegiate relationships, and do not feel a sense of belonging to their college, they are at greater risk of withdrawal (Hausmann et al., 2007; Strayhorn, 2012). This may be especially true for flexible opt-out students, who begin their college careers needing additional layers of support. Researchers have demonstrated that the more integrated in the college community that students become, the less likely they are to withdraw, thereby implicating sense of belonging as a predictor of student persistence (Hausmann, Schofield, & Woods, 2007; Tinto, 1975). Tinto theorizes that students who socially integrate into the campus community increase their commitment to the institution and are more likely to graduate (Tinto, 1975). Integration is enhanced by collegiate relationships, which can strengthen students' commitments, connections, and, consequently, retention (Strayhorn, 2012). One relationship that has shown to improve students' psychological and emotional support (Gunn, Lee, & Steed, 2017), promote involvement (Jacobi, 1991), and lead to additional positive

effects, such as improved academic performance and retention, is the relationship between peer mentor and mentee (Hill & Reddy, 2007; Holt & Fifer, 2016; Kiyama & Luca, 2014).

Research indicates peer mentoring can provide first-year students encouragement and emotional support, reduce stress and anxiety, and strengthen their academic and social networks (Hill & Reddy, 2007; Holt & Fifer, 2016; Kiyama & Luca, 2014). The purpose of this qualitative study is to explore students' perceptions of how peer mentor relationships affect mentees' sense of belonging in college. In the next chapter, I discuss the literature that is relevant to the purpose of my study. Mentioned therein are scholarly research publications regarding peer mentoring, history of peer mentoring in higher education, its uses and benefits, sense of belonging, and theories relevant to my qualitative study.

Chapter 2: Review of the Literature

“Peer mentoring is often considered the single most effective strategy for increasing student retention and student satisfaction” (Egege & Kutieleh, 2015, p. 265). Sense of belonging (integration into the social and intellectual fabric of the institution) is considered another critical factor in postsecondary persistence and retention (Berger & Milem, 1999; Hausmann et al., 2007; Hoffman et al., 2002; Ribera et al., 2017; Schlossberg, Lynch, & Chickering, 1989). The deficit in current research that I intend to address is the perceived influence of peer mentor relationships on feelings of belonging in the college community. My desire to explore the possible associations between peer mentoring and sense of belonging gave direction and focus to my literature review.

My approach to reviewing the extant literature for the study involved seeking out the works of researchers and scholars who develop and study theories of peer mentoring and sense of belonging, primarily within postsecondary education settings. I identified related research topics in the frameworks of other research papers and peer reviewed journal articles. Related topics include student development, transition, retention, persistence, the college freshman experience, and first year experience programs. This body of literature is significant and serves as the foundation upon which this study is built, providing scholarly theoretical support to the ideas, analyses, and conclusions put forth. Narrowing the scope of my research topic, I investigated theories and studies involving peer mentoring and sense of belonging in college. There is an abundance of literature concerning peer mentoring (Andrews & Clark, 2011; Asgari

& Carter, 2016; Collings et al., 2014; Holt & Fifer, 2016; Yomtov et al., 2017), and scholarly literature concerning sense of belonging is increasing (Dumford, Ribera, & Miller, 2019; Hausmann et al., 2007; Hurtado, Alvarado, Guillermo-Wann, 2015; Ribera et al., 2017; Strayhorn, 2012), but I found very little mention in the relevant literature that draws connections between the two (Christie, 2014; Collings et al., 2014; Strayhorn, 2012; Yomtov et al., 2017). The sum of my inquiry efforts provided focus to the research process and guided the methods for my qualitative study.

History of Peer Mentoring in Higher Education

Over the past four decades, scholars published a considerable amount of literature on the use of mentoring relationships. From the mid-1970s through the present, studies and scholarly research on mentoring has proliferated in at least three fields: education, management, and psychology (Jacobi, 1991). Within the field of psychology, adult development researchers placed mentoring within the framework of developmental psychology (Levinson, Carrow, Klein, Levinson, & McKee (1978). Levinson et al. (1978) described the mentor relationship as complex and developmentally important, employing terms such as counselor, guru, teacher, adviser, and sponsor. Speizer (1981) characterized a mentor as an older person in an organization or profession who encourages and supports a younger colleague through career progression. This characterization is not unlike that found in management research. Within the field of management, Kanter (1977) and Roche (1979) emphasized the association between having a sponsor, or mentor, and achieving success in business (Jacobi, 1991). An early topic of research within the field of education was the impact of faculty-student relations on educational experiences and outcomes (Astin, 1977; Pascarella, 1980; Pascarella, Terenzini, & Hibel, 1978; Wilson, Gaff, Dienst, Wood, & Baur, 1975). Most early studies in postsecondary education

perpetuated the paradigm of mentoring relationships between instructor as mentor and student as mentee (Boston, 1976; Phillips, 1979; Reitz, 1975). Boston (1976) described mentorship as possessing the qualities and characteristics of a sorcerer-apprentice relationship, using the exemplar of the bond between the Yaqui Indian sorcerer, Juan Matus, and Carlos Castaneda during the 1960's. Regardless of the field, the majority of the early work in mentor research positioned the mentor as an older and/or more experienced person, guiding the younger and/or less experienced person. While the prevalence of higher education research featuring mentors has increased over the past 45 years (Boston, 1976; Cain, 1977; Campbell & Campbell, 1997; Phillips, 1979; Reitz, 1975), research in the past 25 years has increased wherein scholars illuminated and advocated mentor programs in which student mentees are guided by their peers (Johnson, 1989; Merriam, 1983; Speizer, 1981). Not only has there been a shift in some mentoring responsibilities from elder to peer, but also in its uses within higher education. While early uses of mentoring were seen in the apprentice model of graduate education, mentoring in undergraduate education is increasingly used as a retention strategy (Andrews & Clark, 2011; Crisp & Cruz, 2009; Holt & Fifer, 2016; Kiyama & Luca, 2014), to improve transition to college (Collings, Swanson, & Watkins, 2016; Connolly, 2017; Cornelius, Wood, & Lai, 2016; Holt & Fifer, 2016; Loane, 2015), and to promote integration into academic and social aspects of the college community (Andrews & Clark, 2011; Cornelius, Wood, & Lai, 2016; Yomtov et al., 2017).

Mentoring Relationships

Relationships between mentors and mentees are facilitated either one-on-one or one-to-group (Lawrence, Levy, Martin, & Strother-Taylor, 2008). Research suggests that one-on-one mentoring may be best for building relationships between mentors and mentees, while the one-

to-group arrangement may be better for encouraging positive peer interactions (Herrera, Vang, & Gale, 2002). In a one-on-one peer mentoring scenario, an experienced peer (mentor) guides an inexperienced peer (mentee or mentee) through varying circumstances. This arrangement allows the mentoring pair to develop a relationship by which the mentor can tailor support to meet the needs of the individual mentee. The goal of a one-to-group model is similar to the one-to-one model but in this scenario an experienced peer counsels a group of inexperienced peers. In this arrangement, mentors provide widely applicable support that can be helpful to diverse groups of mentees. A brief Google search resulted in a lengthy list of colleges and universities across states, of all types, and various sizes in the United States where the one-to-one and one-to-group peer mentor models are in use. Florida Agricultural and Mechanical University, Georgia College, Hostos Community College in New York, Miami Dade College, Minnesota Private Colleges, North Carolina Agricultural and Technical State University, University of California Davis, University of South Florida, Utica College in New York, and Washington College in Maryland are among this contingent.

An example of the one-to-group model has been in use since 2012 at Eckerd College, a private four-year liberal arts college in west central Florida. Peer mentoring is an essential element of the college's freshman orientation program. One second-year mentor is assigned to approximately 20 to 22 freshman students and tasked to work closely with the students and faculty to ensure a smooth transition from high school to college (Sanfilippo, 2014). Eckerd is one among many colleges integrating one-to-group peer mentoring in first year experience programs to reduce isolation and help freshmen adjust to the academic, social, and emotional demands of college. Peer mentors at Eckerd College initiate the process by providing direction and guidance to mentee groups. Concurrently, while conducting activities with mentee groups,

mentors are encouraged to develop strong interpersonal relationships with their mentees on a one-to-one basis (Sanfilippo, 2014). In fact, mentors are required to make two attempts to meet one-on-one with each of their assigned mentees during the first term. Adding another layer of mentor support to the model, Eckerd's peer mentors are provided their own mentors with whom to collaborate. These "lead mentors" are juniors who were front line peer mentors in their sophomore year, serving as resources and providing support to current sophomore peer mentors.

Developing Good Mentors

While peer mentor training is advocated in the literature, the recommendations are seldom accompanied by an articulation of recommended training content, skills, and competencies. Despite this deficiency, there are examples of skills, knowledge, abilities, and behaviors mentors should possess and be able to employ to establish and maintain productive relationships with mentees. Broadly, Jacobi (1991) concluded that mentoring programs should consider including the following components: (a) emotional and psychological support, (b) direct assistance with career and professional development, and (c) role modeling. Husband and Jacobs (2009) provide a list of essential mentor characteristics that need to be present for mentoring to be successful. Accordingly, mentors are expected to provide social support (emotional, appraisal, informational, and instrumental) and have self-awareness, commitment, flexibility, patience, and self-confidence. Other researchers illuminate these and additional essential elements of mentor training and competencies. Holt & Fifer (2016) provide a general framework of desirable characteristics for supportive relationships with first-year students. "Potential peer mentors should feel comfortable (a) assisting students with academic, social, and personal challenges, (b) serving as a role model, (c) discussing their own academic and social experiences and challenges, (d) connecting students to campus resources, and (e) helping

mentees to develop academic skills that allow them to function more autonomously in college” (Holt & Fifer, 2016, p. 9). Several of these attributes are also seen in a training collaboration between two Western Sydney University departments, MATES@UWS and the University Counselling Service (Loane, 2015). Western Sydney administrators believe they have designed a training program that ensures mentors are confident in their new role, understand the program’s objectives, develop strong mentor skills, and become familiar with available support resources. They reported that their training program builds mentors’ capacity, thereby ensuring the best possible transition experience for the new students their mentors support. The training content explores a lengthy inventory of skills: empathy (verbal and non-verbal), respect, non-judgmental attitude, valuing cultural diversity, behaviors that build trust, a growth mindset, realistic expectations, study and time management, deep learning, knowing the university’s services and resources, communication, active listening, email and phone etiquette, self-awareness and self-care, managing stress, crisis situations, and more (Loane, 2015).

“A committed, skilled and knowledgeable mentor contributes to a positive new student experience” (Loane, 2015, p. 36). In their practical guide to successful peer mentor programs, Klasen and Clutterbuck (2004) highlight the importance of ensuring everyone involved in the mentoring program receives sufficient training. Certainly, the mentors must be well trained, but an effective program requires a general understanding of the skills, competencies, and expectations of the mentors by all stakeholders. Program efficacy is enhanced when all those involved, even those in peripheral roles, have a common understanding of the expectations of the mentors (Klasen & Clutterbuck, 2004).

Benefits of Peer Mentoring

The benefits of peer mentoring are well established in higher education literature and are situated within three chief categories—benefits to mentees, benefits to peers, and benefits to institutions. Most of the research attributes the benefits of peer mentoring to the mentees who receive the services of mentors. Benefits to mentees range from improved freshman experience, to enhanced student engagement (academically and socially), to increased retention rates. Present but less prevalent are studies that illuminate ways in which peer mentoring benefits the mentors. Peer mentors develop transferable skills in areas of self-management, leadership, and communication. They develop collegiate acumen and wisdom, learning to work as colleagues with faculty. Additionally, a sense of personal satisfaction has been described by mentors as an important benefit. Some of the same benefits gained by mentees can also be beneficial to institutions. For example, when peer mentors aid in strengthening a student’s integration into the institution, the stronger that student’s likelihood of remaining enrolled in college.

Benefits to Mentees. The value of mentoring is well established and recorded in the literature as well as in practice (Andrews & Clark, 2011; Asgari & Carter, 2016; Collings et al., 2014; Egege & Kutieleh, 2015; Holt & Fifer, 2016; Yomtov et al., 2017). Peer mentoring is purported to be the single most effective strategy for increasing student engagement and improving the freshman experience (Egege & Kutieleh, 2015). A supportive relationship which enhances a mentee’s sense of belonging has the potential to improve that student’s academic and social engagement within the college student experience (Rieske & Benjamin, 2015), thus leading to additional positive student outcomes, including retention. In an exploratory research study Gunn, Lee, and Steed (2017) categorized in part, the benefits of participating in a mentoring program from the perspectives of mentors and mentees. The benefit categories

include: (a) psychological and emotional support; (b) goal setting and career path guidance; (c) academic subject knowledge support; and (d) the existence of a role model.

The literature suggests mentoring relationships benefit mentees in a number of ways: academic success (Andrews & Clark, 2011; Asgari & Carter, 2016; Crisp, 2008; Crisp & Cruz, 2009; Goff, 2011); improved persistence and retention (Andrews & Clark, 2011; Crisp & Cruz, 2009; Holt & Fifer, 2016; Kiyama & Luca, 2014; Yomtov et al., 2017); preventing the negative effects of stress (Jacobi, 1991); early access to campus information and resources (Clark & Crome, 2004); skill development (Treston, 1999); social connections (Pope & Van Dyke, 1999; Tinto, 1975); improved transition to college (Connolly, 2017; Cornelius, Wood, & Lai, 2016; Hill & Reddy, 2007; Holt & Berwise, 2012; Holt & Fifer, 2016); and enhancing the sense of belonging (Andrews & Clark, 2011; Evans & Peel, 1999; Strayhorn, 2012; Yomtov et al., 2017). Some researchers have examined the relationship between peer mentoring and academic performance. Asgari & Carter (2016) reported empirical data indicating a significant and consistent improvement in the performance (i.e., grades on scheduled exams) of a mentored group of introductory psychology students. Study participants consisted of seventy-three students from two classes. One class received peer mentoring and the other class did not (control group). Not only did the mentored group perform better on exams, a comparison of final grades within the two groups demonstrated superior performance of the peer mentored group (Asgari & Carter, 2016). Other researchers have examined the relationship between peer mentoring and retention. While Hill and Reddy (2007) express that measuring the effectiveness of peer mentoring schemes in retaining students is difficult, their qualitative study examined students' expectations and subsequent experience with mentoring. A key finding in the study was that Mentors' advice reflected implicit academic values, which when mimicked by mentored

students, the researchers imply is linked to retention (Hill & Reddy, 2007). Still, other researchers have examined the benefit of peer mentoring to integration and feelings of connection. Yomtov et al. (2017) studied this connection in comparison groups of mentored and non-mentored freshmen in a federally funded, university-wide peer mentor program designed to help students succeed. Analyzing self-reported open-ended question surveys to collect pretest and posttest data, the researchers found that mentored students (when compared with non-mentored students) “reported significantly more integration into the university, felt significantly more active at school, and felt a significantly stronger positive connection to the university” (Yomtov et al., 2017, p. 32). The significant feelings of connection held by the mentored students at the end of their first semester suggested peer mentoring strengthened their integration, which may reinforce their persistence toward graduating (Yomtov et al., 2017).

Benefits to Mentors. Benefits of peer mentor relationships are not one-sided; both mentees and peer mentors experience personal growth and success (Andrews & Clark, 2011; Goff, 2011; Kiyama & Luca (2014; Kuh, 2005; Pace, 1979; Pascarella & Terenzini, 1991). Student peer mentors develop transferable skills in areas of self-management, leadership, and communication. Academic benefits to mentors are manifest in the activities of guiding, coaching, assisting, and critical analysis of mentees’ work and that of their own. The result of which places mentors at the center of their learning experiences (Kuh, 2005). Mentors develop collegiate acumen and wisdom, learning to work as colleagues with faculty. Personal and social benefits include personal satisfaction and the opportunity to “give something back” (Andrews & Clark, 2011) and the recognition that they can help others to learn. Kiyama & Luca (2014) explored the social and academic benefits for peer mentors in retention programs. Their findings suggest that the training peer mentors received—aspects of advocacy, role modeling, and

bridging gaps between mentees and information and resources—not only aided in the retention of mentees but also in their own. In particular, the peer-to-peer and peer-to-staff social relationships mentors developed resulted in higher rates of retention among mentors (Kiyama & Luca (2014).

Benefits to Institutions. Whether mentors are unpaid volunteers or paid a small stipend, as in the institution, peer mentors offer a cost-effective method for supporting freshman college students. When mentoring is performed by a college faculty or staff member, the institution incurs costs associated with the employee's extra duties of mentoring. And because peer mentors receive added benefits from mentoring (transferable skills), a certain level of synergy may be achieved through peer mentoring programs. Additionally, some of the same benefits experienced by mentees and mentors equate to benefits for the institution. When freshmen receive support from peer mentors, their integration is strengthened. As Tinto's model of student persistence emphasized, student perceptions of social and academic integration are fundamental to the student's likelihood of remaining enrolled in college.

The benefits of peer mentoring to mentees, mentors, and institutions combine to firmly establish peer mentor programs as effective student success strategies in institutions of higher education. The benefits and the uses are often one and the same. For example, at an institution where peer mentoring is used to improve retention rates, mentees received the benefit of remaining enrolled in college and continuing their education. Similarly, at institutions using peer mentoring with the expectation of improving mentees' integration, mentees receive the benefit of becoming more integrated into the institution.

Uses of Peer Mentoring in Higher Education

Peer mentoring at the student level appears in the literature in two broad themes relative to HE purposes. For one, peer mentoring is used to improve transition to college (Connolly, 2017; Cornelius et al., 2016; Holt & Berwise, 2012; Holt & Fifer, 2016, Loane, 2015). Second, studies conclude that peer mentoring improves persistence and retention (Holt & Fifer, 2016; Kiyama & Luca, 2014; Yomtov et al., 2017). Understanding how mentor programs improve the freshman experience and retention requires a close examination of the aspects of college life through which mentors assist peers. Outlining these themes provides context to the various peer mentoring initiatives implemented to improve the freshman college experience and student retention outcomes.

Transition to College. Peer mentor programs are often used in colleges and universities with the intention to improve transition, freshman experience, and student satisfaction (Andrews & Clark, 2011; Budge, 2006; Collings, Swanson, & Watkins, 2016; Holt & Berwise, 2012). Those practitioners who subscribe to the promise that first year orientation programs reduce isolation and help freshmen adjust to the demands of college life typically view peer mentoring as an essential facilitator of those outcomes. When peer mentors are engaged with mentees early in their college journey, they abate mentees' anxiety and increase feelings of connectedness (Andrews & Clark, 2011). Mentees' anxiety may decrease, and feelings of connectedness may increase when a peer who understands the difficulties of transition to college and challenges that they face during the first year, supports them. Peer mentors support students in a variety of ways: connect mentees to campus resources and individual support services; help them develop success strategies; decrease their fear of failure; help them develop relationships with faculty; motivate them to become more engaged in student life and the campus community; guide them

through challenging curriculum; and help them stay informed of important deadlines and events. Furthermore, the mentoring relationship offers companionship, and the mentee may view the mentor as a confidant—someone with whom they can have confidential conversations—providing the mentee enhanced sense of connection and belonging he or she may not perceive otherwise.

The institutional environments and cultures of high school and postsecondary school are quite different from each other. Making the transition from high school student to successful college student presents various challenges. New students must navigate a foreign set of norms, learn new traditions and rituals, and become accustomed to a new environment (Hunter, 2006). Ensuring each student experiences a smooth and well-supported transition into college life is an important concern for higher education professionals. The quality and types of support provided by colleges and universities during the transition period from high school—or non-academic life, in the case of many community college students—to an HEI is critical to student retention (Pitkethly & Prosser, 2001). A common description of transition involves the student leaving high school, home, friends, and transitioning into college student life. This description typically assumes that the student will live on campus at a college or university, quite possibly in another city or state. A student's ability to emotionally and psychologically acclimate to their new environment, accept new responsibilities, and face new decisions has bearing on indicators of student success. Freshmen often feel anonymous, insecure, and isolated, especially in large classes (Hockings, 2005; Mann, 2001). Armed with this knowledge, HEIs create orientation programs designed to increase engagement, improve transition, reduce feelings of isolation and insecurity, and facilitate social and academic networks (Kift, 2004). One of the most common interventions used to facilitate this process is mentoring (Egege & Kutieleh, 2015).

Much of student success in higher education is linked to the support they receive as they transition to and during the first year of college (Andrews & Clark, 2011; Hurtado & Carter, 1997; Ribera et al., 2017). Positive or negative, transition to community college depends on myriad new experiences for first-year students. Students must make a variety of adjustments when transitioning to college. If a student is relocating, they may find it difficult to move away from home because they fear they will not know anyone at their new school. Some have not been away from home before. The first year of college can be a time of major adjustments and involves shifting from a highly dependent lifestyle to one of greater independence. Students often find it difficult to adjust to their new environment because they feel disconnected or distanced from most lines of support to which they are accustomed to receiving. Younger students must navigate and negotiate aspects of adult life as never before; financial issues, schedule challenges and conflicts, appointments, and other unfamiliar demands on their time. New college students face important decisions at an unprecedented rate, which has significant impact on the students and their success academically and socially. Collings, Swanson, and Watkins (2014) conducted a matched longitudinal comparison between two universities using a survey-based methodology. They concluded that mentoring smoothes the transition process, improves integration, and reduces students' intentions to leave. Higher education practitioners all around the world recognize the need to support and care for students and understand the importance of considering all conceivable aspects of a student's college experience, especially during the first year. The findings from the research conducted by Collings et al. (2014) are significant in that they add to the abundance of convincing literature that supports peer mentoring programs as effective support mechanisms for freshmen college students.

The first year of college is widely acknowledged as a critical time for new students. Making the decision to attend college and begin postsecondary coursework can be a significant and often difficult step in a person's life, regardless of educational or social background (Andrews & Clark, 2011). New students expect a certain amount of guidance from admissions employees, academic advisors, instructors, administrative personnel, and leadership. A relationship with someone, such as a peer, who has successfully navigated similar challenges can provide an additional layer of care and support as the mentee makes the critical transition into college life. "Peer mentors provide advice on aspects of the hidden curriculum and information that could not be received through handbooks" (Collings et al., 2014, p. 939). Mentees can benefit from having someone to talk to about specific classes, instructors, programs of study, policies and procedures, social challenges and successes, and academic strategies. Without the information provided by peer mentors, student might experience uncertainty and ambiguity, which may affect levels of self-esteem (Collings et al., 2014). When freshmen experience feelings of isolation or uncertainty, peer mentors help reduce the emotional impact produced by these feelings. Glaser, Hall, and Halperin (2006) found that new students who participated in a peer mentor relationship reported higher levels of success in making the adjustment to university life.

The significance of student experiences during transition and the first year of college can be expressed in specific factors of student satisfaction with the college environment. The Cooperative Institutional Research Program conducted a longitudinal study of incoming freshman classes including twenty-seven different factors of student satisfaction (Astin, 1993). Performing a factor analysis to combine related items researchers identified five general satisfaction factors - relationship with faculty, curriculum and instruction, student life, individual

support services, and facilities - all of which carry the potential of being addressed within the context of a peer mentor-mentee relationship. Peer mentoring is a popular choice among HEIs as an intervention in one or more of Astin's five general satisfaction factors. Mentors develop relationships with faculty members, thereby modeling appropriate collegiate communication and behavior for mentees.

Involvement and integration. For some time, involvement has been studied as a statistically significant contributor to desirable outcomes (Astin, 1984, 1993; Moore, Lovell, McGann, & Wyrick, 1998; Terenzini, Pascarella, & Blimling, 1996). Student development theorist, Alexander Astin (1984), described highly involved students as those who study regularly, spend extra time on campus, actively participate in student organizations, and have frequent interactions with faculty, staff, and peers. In this hypothetical example, these students experience greater learning, greater personal development, stronger collegiate connections, and higher levels of involvement, thereby strengthening their sense of belonging, and ultimately their drive to persist. Astin (1984) identified two chief characteristics of student involvement: the amount of physical energy a student exerts and the amount of psychological energy he or she gives to their college experience. To support and develop new students, peer mentors model involvement and encourage mentees to get involved in various ways within the campus community, thereby increasing the amount of physical and psychological energy new students devote to activities of involvement.

Persistence and Retention. Astin's longitudinal study ties involvement—the amount of physical and psychological energy that the student devotes to the academic experience—to college student persistence (Astin, 1975), suggesting lack of involvement in the college community contributes to students' departure from college. Tinto's (1993) model of student

departure—a revision of his initial conceptual model (Tinto, 1975) —provides insights in the interaction between student behavior and perception as they become integrated with their social and academic environments. Tinto (1993) describes three major sources of student departure—the third of which he states as “failure to become or remain incorporated in the intellectual and social life of the institution”. Tinto emphasizes the importance of incorporation to a student’s ability to persist with specific college integration experiences: formal and informal academic systems; and formal and informal social systems (Tinto, 1993). An example of a formal academic system is academic performance, while an example of an informal academic system is interaction with faculty and staff. An example of a formal social system is extracurricular activities, an informal social system is interaction in peer group situations (Tinto, 1993). Tinto’s ideas of incorporation and integration are compatible with Strayhorn’s ideas about sense of belonging. The greater the sense of belonging, the stronger the commitment to the institution, and the more likely it is that the student will remain in college (Hoffman et al., 2002). Strayhorn (2012) asserts that sense of belonging is associated with students’ psychological experiences and their subjective perceptions of their level of integration in college. Advancing this concept of integration a step further, he suggests that sense of belonging is a student’s perceived membership and “fit” in the college community,—being accepted, included, welcomed, and cared about (Strayhorn, 2012)—which may lead to mentees decisions to remain in college (retention).

The literature demonstrates peer mentoring programs have been successful in improving student persistence and retention (Andrews & Clark, 2011; Collings et al., 2014; Holt & Fifer, 2016; Kiyama & Luca, 2014; Rieske & Benjamin, 2015).

Student retention continues to be a primary concern for college administrators, especially those administrators at community colleges. In fall 2017, approximately 51% of community college students did not return to the same institution for their sophomore year (CCRC, 2016). Among students who started college in fall 2016 at a public two-year college, 62.2% were still enrolled at any institution (persistence) in fall 2017. Just under 49% returned to the same college (retention). Persistence rate accounts for students who return to college at any institution for their second year, while retention rate accounts for students who return to the same institution for the second year. Although retention and persistence are dissimilar, my literature review includes discussion of both indicators, relative to peer mentoring and sense of belonging. Together, these populations comprise students who continue their postsecondary education for a second consecutive year. While persistence and retention are influenced by many forms of student involvement—such as engagement in academic work, participation in extracurricular activities, and interaction with faculty and other institutional personnel—Astin (1984) studied the effects of several specific forms of student involvement on persistence and retention. Astin’s theory directs attention to the motivation and behavior of the student, in both academic and nonacademic matters: place of residence, honors programs, undergraduate research participation, social fraternities and sororities, academic involvement, student-faculty interaction, athletic involvement, and involvement in student government. Students’ motivation and behavior relative to these matters may be influenced by the intervention of a peer mentor program.

Involvement and retention may be reduced in students who have significant responsibilities outside of the college community. For example, the level of involvement for a student who works off campus at a full-time job likely will not be as high as a student who does not have outside responsibilities and spends a significant amount of time on campus. Large

demands on a student's time and energy, such as working full time, decreases the time and energy that he or she can devote to academic pursuits. Since community college students usually do not live on campus, and must commute, and most of them work at least part-time, involvement at community college can be less than at a university (Astin, 1984). Consequently, the student's chances of dropping out are substantially greater at a 2-year college than at a 4-year college (Astin, 1984). Collings, Swanson, & Watkins (2014) investigated the role of peer mentoring in integration for university students in their first year. They found that non-mentored students were four times more likely to want to withdraw in their first semester than university students who engaged in peer mentor relationships.

One outlier study which did not find that retention rates were improved for mentored first-year students was conducted by Rodger and Tremblay (2003). The researchers studied the effects of a peer mentoring program on academic success among freshman university students. One of their hypotheses stated that peer mentoring would increase the retention of mentored students between freshman and sophomore years. To determine whether peer mentoring influences post-freshman university retention rates, the researchers investigated students who returned to university in the second year. A Chi square test of independence revealed no significant differences among the test and control groups. Nonetheless, colleges and universities are using peer mentor schemes to support and develop students socially and academically, improving transition (Connolly, 2017; Jacobson & Mustafa, 2019; Cornelius et al., 2016; Holt & Fifer, 2016), and persistence and retention (Holt & Fifer, 2016; Kiyama & Luca, 2014; Kiyama et al., 2014; Yomtov et al., 2017).

Peer Mentors as Facilitators of Sense of Belonging. Peer mentors at the institution are expected to employ activities and practices that support and foster students' sense of belonging.

The uses of peer mentoring—transition, involvement and integration, and persistence/retention—provide opportunity and context for such activities and practices. As students transition to the college, mentors may be expected to assist mentees with decisions about course of study, learning modality (online, live online, or face-to-face), and choice of professor. To strengthen mentees' involvement and integration within the college community, mentors may encourage mentees to become involved in social organizations and activities, promoting a balanced college student lifestyle. Mentors are expected to connect mentees with campus resources, improving mentees' overall support within the campus community.

Peer mentoring is purported to be the single most effective strategy for increasing student engagement and improving the freshman experience (Egege & Kutieleh, 2015). A supportive relationship which enhances a mentee's sense of belonging has the potential to improve that student's academic and social engagement within the college student experience (Rieske & Benjamin, 2015), thus leading to additional positive student outcomes, such as persistence (Hausmann et al., 2007). Belonging can be propagated and stimulated by mentors throughout a student's development in college, but especially during the freshman year. Mentors can strengthen mentees' affiliation and identification with the college community when they assist students with academic, social, and personal challenges, role-model positive behaviors, talk about their own experiences and challenges, connect students to resources, and help mentees achieve greater autonomy in college (Holt & Fifer, 2016). Peer mentor programs that attend to these factors can be effective intervention strategies, strengthening sense of belonging, reducing attrition, and improving the effectiveness of retention programs (Hausmann et al., 2007; Loane, 2015).

Theoretical Framework

Concepts of student development, peer mentoring, and sense of belonging form the basis of my theoretical framework. Through the exploration of the perceptions and experiences of peer-mentored college students this study provides useful insights into the influence of peer mentoring on sense of belonging. In the following sections, I discuss the associations between these foundational concepts.

Sense of Belonging. Terrell Strayhorn's hypothesized model of college students' sense of belonging (Figure 1), built upon the foundation of Abraham Maslow's (1943) hierarchical model of human needs, provides the framework for this study on the influence of peer mentoring on community college students' sense of belonging. Maslow's (1943) model of human needs describes five stages of human development. Each succeeding stage is achieved as the preceding stage is satisfied. According to Maslow, belonging is one of these basic needs, which humans must satisfy on their way to becoming self-actualized. Therefore, once a person's physiological and safety needs are met, he or she perceives the next need to satisfy is a sense of belonging. Building on Maslow's (1943) hierarchy of needs, Terrell Strayhorn's (2012) theory on college students' sense of belonging emphasizes the positive outcomes of achieving this stage. Once satisfied, belonging in college can lead to positive outcomes such as achievement, growth, persistence, and happiness (Strayhorn, 2012), and motivation to seek more opportunities which provide similar gratification. Strayhorn's theory on college students' sense of belonging serves as the theoretical lens through which I examine the influence of peer mentoring on students' sense of belonging, providing effective theoretical support for this study.

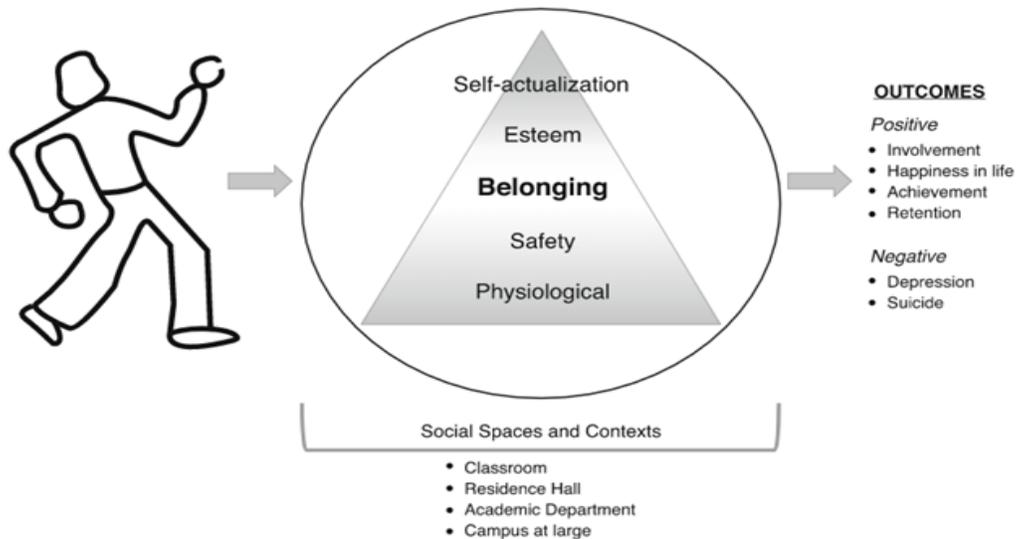


Figure 1. Strayhorn’s hypothesized model of college students’ sense of belonging. From *College students' sense of belonging: a key to educational success for all students* (p.25), by Strayhorn, T., 2012, p. 25, New York; NY: Routledge. Reprinted with permission (Appendix A).

Strayhorn framed the sense of belonging “as a basic human need and motivation, sufficient to influence behavior” (Strayhorn, 2012, p. 17). He placed emphasis on the role this phenomenon plays in the identity exploration and personal development of college students. He states three fundamental concepts to sense of belonging: sense of belonging is a basic human motivation; factors exist which influence students’ sense of belonging; and sense of belonging influences important outcomes such as achievement and plans to stay in college. Students’ perceived connectedness to other members of the campus community, perceptions of their value in the college setting, and respect given to them by others, all play a part in college students’ sense of belonging. Further contextualizing his model within higher education, Strayhorn identifies social spaces and contexts—classroom, residence hall, academic department, and campus at large—as areas students must navigate and negotiate within, and in which students

develop perceptions of belonging. Therefore, sense of belonging is situational and multidimensional.

Intersection of Student Development, Peer Mentoring, and Sense of Belonging. The existing scholarly research suggests peer mentoring has many benefits to student success, especially in the areas of transition (Connolly, 2017; Cornelius et al., 2016; Holt & Berwise, 2012; Holt & Fifer, 2016) and persistence and retention (Holt & Fifer, 2016; Kiyama & Luca, 2014; Kiyama et al., 2014; Yomtov et al., 2017). Studies also show that sense of belonging is linked to college student success in transition (Cornelius et al., 2016; Holt & Fifer, 2016; Hurtado & Carter, 1997; Ribera et al., 2017) and persistence and retention (Hausmann et al., 2007; Hoffman et al., 2002; Strayhorn, 2012). What current research has failed to adequately explore are the associations between peer mentoring and sense of belonging.

Generally, peer mentoring occurs outside of the classroom and is introduced to enhance some aspect of student development (Jacobi, 1991; Strayhorn, 2012). Student development theory (SDT) involves the study of ways in which students grow, gain knowledge, and develop. SDT provides context for the connections between identity development and sense of belonging. It is important for college stakeholders to understand human development theory and student development theory so they may design programs and provide resources which attend to students' needs in various social spaces and contexts.

Although there is a host of theories dealing with various aspects of human development, they tend to be categorized within four broad categories: psychosocial theories, cognitive-structural theories, person-environment interactive theories, and humanistic-existential theories (Long, 2012). Psychosocial theories describe how students' perspectives of identity and of society evolve through the conflicts and crises they experience (Long, 2012). In practical

application, peer mentors provide support and guidance to mentees who experience difficulties while attending college. Cognitive-structural theories explain how students think, reason, organize, and make meaning of their experiences (Long, 2012). Peer mentors assist mentees through stages of cognitive development as they build upon past experiences. Person-environment interactive theories describe how the educational environment influences student behavior and growth (Long, 2012). Mentors take on active roles in mentees' college life, becoming integral to their educational environment. Humanistic-existential theories have been developed to illustrate how students make decisions that affect themselves and others (Long, 2012). Using helping skills, mentors assist mentees in making a variety of decisions and can help mentees reflect on the effects of those decisions. Peer mentors have the potential to positively affect students' sense of belonging by bridging the academic and social aspects of student development. Consequently, student identity development can be fostered and supported, which may strengthen sense of belonging.

Student development scholar, Arthur Chickering (1969), theorized that college students must engage in seven tasks to achieve full identity development. At the center of each task is one of the following proficiencies: (1) competence – intellectual, interpersonal, physical, and manual skills; (2) ability to manage emotions – recognize and accept emotions, and appropriately express and control them; (3) interdependence – move through autonomy toward interdependence and increase emotional freedom; (4) mature interpersonal relationships - develop intercultural and interpersonal tolerance, appreciate differences, create healthy and intimate relationships; (5) identity - acknowledge differences in identity development based on gender, ethnic background, and sexual orientation; (6) purpose - develop career goals, make commitments to personal interests and activities, establish strong interpersonal commitments; and (7) integrity - humanize

and personalize values and develop congruence. These proficiencies offer a multitude of opportunities for peer mentors to intervene. The more effective the mentoring, the greater the chances that the mentee will be proficient in these tasks. In Chickering's context, the greater the chances that the student will achieve full identity development. Within college settings, the student's identity, to some degree, will be intertwined with attachment to the college (sense of belonging).

Tinto (1993) found that persistence is reliant on forming positive academic and social relationships. When peer mentors assist mentees in forming positive relationships with faculty members, advisors, and administrative staff, mentees' feelings of academic belonging are enhanced. Peer mentors may promote institutional acceptance in mentees by encouraging participation in high impact practices such as learning communities, service learning, research with faculty, and campus leadership (Ribera et al. 2017). Likewise, when peer mentors support mentees' in forming positive social relationships, mentees' feelings of peer belonging are enhanced. Peer mentors can promote memberships to student organizations and clubs and introduce mentees to other students who may have similar interests, thereby enhancing mentees' sense of belonging among their peers. Yomtov et al. (2017) found that mentored students reported significant feelings of connection to their institution, suggesting that peer mentors strengthened mentees' sense of belonging. Peer programs are known to foster a sense of belonging, consequently, peer mentors can be facilitators of sense of belonging.

Summary

The goal of the college's QEP peer mentor program is to provide flexible opt-out students support, knowledge, skills, encouragement to persist toward completion of their academic goals. Peer mentors bridge the academic and social aspects of college life leading to enhanced sense of belonging. Therefore, it is critical to ensure peer mentor programs include activities and practices that support and foster students' sense of belonging. Exploring the perceptions and experiences of college student involved in peer mentor relationships may provide useful data which will aid in our understanding of the influence of peer mentoring on sense of belonging, ultimately leading to programs, policies, and practices that increase student success.

In the next chapter, I outline specific methods chosen to examine the problem and answer the research question. I discuss the research methods employed to identify associations between peer mentoring and sense of belonging, and to explore the perceptions and experiences of student mentee participants in a peer mentor program. I describe the participants in the study, data collection procedures, interview protocol and questions, and the data analysis process.

Chapter 3: Research Methods

A goal of this study is to prioritize the student perspective by exploring the perceptions and experiences of community college students in a peer mentor program. I did not seek a singular truth or linear prediction about the relationship between peer mentoring and sense of belonging. I endeavored to explore the array of ways in which peer mentors influence sense of belonging in mentees. Ribera, Miller, and Dumford (2017) found that much of the literature treats students' feelings of belonging as a single measure of one's general sense of belonging at an institution. The researchers suggest a multi-dimensional analysis is needed to recommend areas of the campus environment that need attention. Following this logic, I designed the study to examine the situational aspects of sense of belonging. For example, peer mentoring may enhance feelings of belonging in the dimension of transition, but not in the dimension of desire to return in the subsequent term. A study using a unidimensional approach (e.g., overall sense of belonging) will not achieve the level of detailed analysis that can be achieved using a multidimensional approach.

To achieve the purpose of this qualitative study, I focused on a single broad research question: What are community college students' perceptions of the effect of peer mentoring on their sense of belonging in college? To adequately explore the various situational and multidimensional aspects of belonging, using the literature as my guide, I derived interview questions that address sense of belonging within two dimensions—peer belonging and

institutional acceptance (Ribera et al., 2017; Strayhorn, 2008)—and peer mentoring’s influence on those dimensions of belonging.

Research Design

This is a descriptive study to explore the perceptions and experiences of exemplars of the well mentored construct. For my qualitative design to be effective in answering my research question, I needed an approach that reached for deep exploration of participants’ experiences and perceptions in an area that has not been well studied. Because I could not directly observe the participants while they were being mentored, I relied on the historical information that they provided during the interviews (Creswell, 2014). These semi-structured interviews provided rich insight to participants’ perceptions and experiences. Since the nature and quality of relationships vary among mentoring pairs, it was important to have in place a systematic process for sampling potential participants with the aim of interviewing exemplars—well mentored students.

Exemplar methodology offers the appropriate approach to deeply understand the ways in which peer mentoring may affect sense of belonging in college students. The methodology employs a unique sample selection process whereby individuals, entities, or programs exhibiting high levels of specific criteria are purposefully selected for their ability to exemplify the construct of interest (Bronk, 2012; Bronk, King, & Matsuba, 2013; Damon, 2009)—in this case, students who were mentored in accordance with the college’s guidelines.

My design avoided the use of matched comparison samples (non-exemplars). As Bronk (2012) explained, “Many effective exemplar studies have included matched samples (e.g., Bronk 2008; Hart & Fegley 1995; Matsuba & Walker 2004; Matsuba & Walker 2005; Reimer 2003; Walker & Frimer 2007), but other valuable studies have not (e.g., Bronk 2011; Bronk 2012; Colby & Damon 1992; Mastain 2008).” He added that a comparison with a matched sample is

not needed if a characteristic or experience is evident among the sample. According to Bronk (2012), “What we glean by studying exemplars alone is sufficient to describe what these individuals are like with regards to their development in a particular area” (Bronk, 2012, p. 3). Studying exemplars alone provides a richer and deeper understanding of the experiences of well mentored students and answers the research question.

The first step in the process was to design a set of nomination criteria that captured exemplarity of the construct under study. The nomination criteria served as standards to qualify exemplars (Bronk, 2012). I used a definitional approach to characterize the nature of exemplarity in a peer mentoring relationship. The definition being that participants exhibited at least one of the criteria of well mentored students—students who were mentored in accordance with QEP requirements. During development of the QEP, the steering committee created a Peer Mentoring Handbook (2017), which provided detailed mentor objectives. The handbook served as the resource from which I developed mentee exemplar nomination criteria (Appendix B). Sources used in the development of the college’s peer mentor requirements include several research studies (Budge, 2006; Crisp & Cruz, 2009; Goff, 2011; Kiyama & Luca, 2014). The next step in the process was to identify individuals who could nominate exemplars using the nomination criteria. This step is discussed in greater detail in the next section.

Background

While mentees were the subjects of this study, background information regarding the Neighborhood for Success program, the NFS 1000 support class, and peer mentors provides context and clarity to the mentees’ experiences, mentor relationships, and how students were expected to be mentored. Flexible opt-out students are not required to participate in the program. Students who volunteer to participate are asked to commit to becoming a member of the

Neighborhoods for Success (N4S) learning community and attend a support class (NFS 1000) weekly in the fall semester and biweekly in the spring. Through the N4S learning community, these students receive extra support from faculty mentors, success coaches, and peer mentors and practices. NFS 1000 instructors introduce students to several targeted concepts and strategies—learner mindset, time management, knowledge monitoring, and comprehension—to help them become more academically edified and resilient.

Presently, the college's QEP is in its third year. The initial 2017 cohort of flexible opt-out students did not have the benefit of peer mentors. The 2018 cohort was the first group of students to receive mentors. The mentors embedded in the college's 2018 QEP learning community were themselves flexible opt-out students, from the initial 2017 cohort, who had completed the same NFS support classes in which the 2018 mentees were enrolled. The mentors were second-year students who sat in the same seats as the mentees, metaphorically speaking, during the previous year. Peer mentors in the learning community had first-hand knowledge and experience in successful completion of coursework common to the students they mentored. These students learned how to navigate the many challenging academic, administrative, and social aspects of the freshman college experience. In this case, the population from which mentors were chosen exhibits the same characteristics as the population of mentees; however, these students possessed added knowledge, strength, resiliency, and experience gained by persisting and completing the support classes as well as general education academic classes. This cohort provided the ideal pool from which peers were selected to mentor and build relationships with new mentees matriculating into the program. The relationship is intended to provide the mentee an additional layer of support, caring, and guidance through the unique

challenges and obstacles he or she faces as a new college student, and particularly as a flexible opt-out student.

Peer Mentor Selection

Applications for peer mentor candidates are solicited each April. To be considered for selection, candidates must satisfy three criteria: (1) successful completion of academic coursework by earning at least a 2.5 Grade Point Average; (2) must have completed at least one semester at the college; and (3) recommendation letters from two faculty and staff members such as professors, career and academic advisors, or club advisors. Notably, during the 2019-2020 academic year, the QEP committee allowed students who were not flexible opt-out students to apply to be mentors. Although mentor applications were advertised to the 2018 flexible opt-out cohort, none of the four mentors chosen in 2019 were flexible opt-out students.

Peer Mentor Training

Peer mentors attended a one-day training session that covered the nature of peer mentoring, requirements, expectations, the handbook, strategies for working with mentees, listening habits, and resources and support services. The training included role play activities designed to develop skills needed to handle social interactions inherent in mentoring relationships. Exposure to these concepts and role-playing scenarios helped to develop mentors' way of thinking and feelings of empathy.

Mentor-Mentee Pairing

While research shows that pairing students with similar traits may enhance the mentoring relationship, peer mentors in the QEP program were paired with mentees indiscriminately. When using the one-to-group mentor model, as in the QEP, it is not always possible to pair mentors with mentees on the basis of gender, ethnicity, etc. Mentee groups at the institution

studied are not homogenous and therefore it is not possible to pair mentors with mentees having similar traits. Mentors are assigned to groups of mentees based solely on the characteristic of campus assignment.

Peer Mentor Accountability

According to the QEP peer mentor handbook, mentors are expected to attend weekly class meetings, assist faculty with implementing curriculum, contact mentees at least three times throughout the semester, and connect mentees to faculty, advisors, student life, and other resources. Additionally, mentors are expected to promote belongingness to the college by encouraging mentee participation in events activities, and organizations. Mentors are to model successful student practices such as balancing academic and social demands, engaging with faculty, and utilizing learning support resources. While the handbook enumerates mentor responsibilities and standards of behavior, there is no formal accountability to which mentors are held. There are opportunities for program leaders to check in with mentors, but there is no prescribed mechanism in place to assess completion of mentor responsibilities.

Participants

Since the nomination criteria for mentee exemplars are based in how well students were mentored, in accordance with QEP requirements, I designed the criteria from the perspective of peer mentor objectives—specifically those objectives related to mentors working with mentees. The Quality Enhancement Plan states that peer mentors are expected to contact mentees to accomplish specific activities designed for interaction and development of trust. Mentors are expected to build relationships with each mentee by engaging them in discussions about academic progress, obstacles that may be preventing the mentee from being successful, college resources that are available to help the mentee overcome those obstacles, and a wide array of

additional topics of interest to each individual mentee. The Peer Mentoring Handbook (2017) developed by QEP leadership personnel provides instructions designed to assist mentors to accomplish objectives related to working with mentees. Accordingly, the handbook served as the resource from which I designed mentee exemplar nomination criteria.

Data Collection

I identified eight potential nominators within the QEP community and emailed them for assistance with participant recruitment (Appendix C). These individuals were in full engagement in the program and had knowledge of students who were well mentored and had a high probability of exhibiting exemplar nomination criteria. The salient members (nominators) included faculty mentors and success coaches involved with each of the three cohorts where peer mentoring occurred. Faculty mentors, success coaches, and peer mentors were not involved in data collection and were not asked to report back any information to me. I only requested that nominators (faculty mentors and success coaches) share the study information sheet (Appendix D) with mentored students and instruct students to contact me directly if they were interested in participating. I did not ask nominators to share their nominations with me and I did not share with them their nominee's decision to participate in the study. I did not solicit nominations from the peer mentors because they may have a propensity, whether knowingly or unknowingly, to nominate mentees whom they favored, thereby skewing the data.

Out of the group of 34 mentored students, only one replied with interest in taking part in the study. After two weeks, and still only one participant, I asked nominators to share the study information sheet again. I did not acquire any additional participants during the two weeks that followed my second request. This prompted me to consult with my dissertation committee chairperson and my research compliance administrator and consider a different approach to

recruitment. To secure additional participants, I changed the recruitment protocol to email students directly (Appendix E), including a requirement that prospective participants self-identify with at least one of the exemplar characteristics (Table 1) prior to volunteering. A total of three volunteers participated in the study.

I collected qualitative data through a single lengthy, up to one and a half hours, semi-structured interview with each participant, using a HIPAA-compliant video conferencing service to maintain security to protect participants' privacy and safety. Participants were given the choice of using one of the following services: Skype for Business, Microsoft Teams, Zoom, or Google G Suite. All three participants chose Zoom and at the beginning of the interview session informed consent (Appendix F) was collected from each participant. The semi-structured interview style and the setting (participants' own homes) allowed participants the freedom to express their views in their own terms while providing reliable, comparable qualitative data (Cohen & Crabtree, 2006).

Participants were informed ahead of time that the interview topic was related to their perceptions about the relationship with their peer mentor and the role the mentor played in their feelings of belonging in academic and social settings at the college. Additionally, I explained that beyond the initial interview, I would provide my analysis to them so that they may compare my interpretations of their responses to the actual intended meaning. The purpose for this was to gain participants' agreement to participate in participant feedback, providing the opportunity to ensure that their thoughts and perceptions were represented as accurately as possible.

Interview Questions and Prompts

Using my theoretical framework to inform my decisions about the interview process, I designed the interview prompts (Appendix G) to encourage participants to provide detailed information about their experiences and perceptions while participating in peer mentor relationships during their first two semesters. The semi-structured qualitative interview allowed participants to tell their own stories in their own terms. I designed the prompts to target the influence of peer mentoring on specific aspects of sense of belonging to improve the probability of capturing data that illuminate the salient elements of the theoretical framework and answer the research question. I wrote the interview questions and prompts with the foreknowledge that they serve as guides, reminding me of necessary topics and contexts to cover, questions to ask, and areas to probe. Therefore, I had the framework needed to reach for as much richness and depth possible within a limited amount of time, up to one and a half hours. Although I only conducted one interview with each participant, the lengthy interview time allowed ample time for participants to provide rich stories and detailed descriptions about their experiences and perceptions.

Data Analysis

So that others can evaluate my research, compare it with other studies, and to assist other researchers carrying out related projects, I provide clear descriptions of my methods and why I chose them. To this end, I also include a discussion of how I went about analyzing the data and the assumptions that informed my analysis. To a constructionist, or anyone who enjoys building literary arguments, thematic analysis (TA) for qualitative research can be a satisfying pursuit. Themes identify relevant topics and subtopics about the data in relation to the research question and represent patterns and meaning within the data set (Braun & Clarke, 2006). The entire

undertaking of analyzing data this way is a highly creative process, allowing the researcher to critique and analyze data with his own discernment and to tease out patterns and themes deemed significant. Thematic analysis is personal and judgmental. Virginia Braun and Victoria Clarke (2006) of University of Auckland's School of Psychology described the process of TA, which is concise and relatively congruent with my education from other resources. The description includes a template for performing TA, which I used as a framework for my approach to analyze data. Braun and Clarke (2006) proposed six phases of TA—data familiarization, coding, generating initial themes, reviewing themes, defining and naming themes, and contextualizing the analysis in relation to existing literature. Although they provide a near step-by-step process explaining what TA is and how to do it, Braun and Clarke did not lead practitioners to believe it is a wholly linear process. They explain that although the steps, or phases, are sequential, there can be a blurring between them. Furthermore, TA is usually a recursive process whereby the researcher revisits previous phases (Braun & Clarke, 2006).

The reason TA is the appropriate method for my research stems from my role as an active qualitative researcher. Rather than passively expecting themes to 'emerge' from the data, I chose to view the process of analysis from the position of an active researcher—identifying themes, selecting those that answer my research question, and reporting them (Taylor & Ussher, 2001). As an active researcher, I employed the phases of reflexive TA with an essentialist or realist approach to identify patterned meanings across my dataset that provide plausible answers to my research question. When the researcher focuses on reporting an assumed reality evident in the data, he or she is using a realist or essentialist approach. In assuming this approach, I focused on reporting the assumed reality that peer mentoring affects sense of belonging with the expectation that I would identify this phenomenon within the data.

Data familiarization. Theoretically coherent and consistent qualitative analysis requires a systematic process that can be repeated for improved verisimilitude. Generally, TA begins with the researcher becoming intimately familiar with the data. Since the Zoom program converts speech to text automatically, much time was saved in the transcription phase of data collection. I only needed to correct the transcripts as I listened back to the recordings. I listened to each of the interview recordings twice each and read each interview transcript twice prior to beginning the coding process. This piece of the process provided me a reasonable sense of confidence that I gained a high level of understanding relative to the participants' intended meaning throughout the interviews. The transcribing process alone allowed me to pay very close attention to the words each participant spoke as well as the inflection in his or her voice. This familiarity with the data improved my ability to transition into the next phase in the process—coding.

Coding. Coding is the process of attaching symbols, descriptive words, labels, or category names to segments of raw text data (Johnson & Christensen, 2017). Following each interview, I captured the raw transcripts from Zoom and made corrections. Next, I analyzed the data through open coding (Allen, 2017) to make initial sense of it. The open coding analytic process allowed me to generally attach concepts and phenomena to the observed data (Allen, 2017) and assign codes to chunks of data. This process involves questioning, reflecting upon experiences, perspectives, and words of my participants for their relevance to the research question, and organizing the raw data into operational theoretical or conceptual categories (Mills, Durepos, & Wiebe, 2010). Next, I looked for interconnecting categories using axial coding to determine if there were any data that fit into my theoretical model. Axial coding enabled me to identify the characteristics or phenomena around which differences in properties or dimensions exist and construct linkages between data (Allen, 2017; Mills et al., 2010).

During the final phase of the coding process, selective coding, I related the identified categories to my theoretical model—peer mentoring influences sense of belonging in college—focusing only on the most relevant categories.

Final Stages

Continuing the analytic process, I identified three themes in the data associated with peer mentors' influence on students' sense of belonging in college. These themes came from ideas of connections and connectedness to peers and the institution; academic, cocurricular, and social engagement; and transition experiences. In Chapter Four, when discussing the results of the study, additional details about these stages of analysis are described.

Trustworthiness

Qualitative researchers address the issue of validity of data analysis in terms of trustworthiness (Patton, 2015; Roberts, 2010). Lincoln and Guba (1986) described the characteristics of trustworthiness as credibility/internal validity, transferability/external validity, dependability/reliability, and confirmability/objectivity. To achieve these aims, Johnson and Christensen (2017) reported a list of sixteen strategies that can be used by qualitative researchers to increase trustworthiness or verisimilitude. For this study, I employed four strategies from Johnson and Christensen—peer review, participant feedback, triangulation (reflective journal, and reflexivity (including positionality)). I discuss each of these strategies in greater detail below.

Peer review. Soliciting the assistance of a peer who did not participate in the study and who had no personal investment in the outcome of the study improved the trustworthiness of my analyses. I chose as my reviewer a colleague who has a Ph.D. in Literary Studies. Through discussions of my actions, interpretations, and conclusions with my peer, I was able to ensure

that I provided support for my interpretations and conclusions (Johnson & Christensen, 2017). Additionally, the review provided opportunities for the peer to provide challenges and insights which further improved my interpretations and conclusions, thereby strengthening the trustworthiness of my analysis. An example of this was when the reviewer questioned and assumption I made about the data. Since I took a realist or essentialist approach, I focused on reporting an assumed reality evident in the data—peer mentoring affects sense of belonging. The reviewer asked me to consider whether my initial assumption was positive or negative. While I expected to identify the phenomenon within the data, I did not want to assume that all participants' responses would suggest that peer mentoring affects sense of belonging in a positive way. To maintain objectivity, I remained open to the possibility that some data may suggest peer mentoring affects sense of belonging in a negative way, or not at all.

Participant feedback. Sometimes called member checking, this strategy allowed me to contact participants again after the initial interview. I provided each participant a copy of my analysis and asked them to check my analysis for accuracy and resonance with their experiences (Birt, Scott, Cavers, Campbell, & Walter, 2016; Creswell, 2014). This gave participants the opportunity to provide feedback and comments on my findings (Creswell, 2014). I received no feedback from participants, further enhancing the credibility of my interpretations of accounts.

Reflective journal. The act of capturing my assumptions, interpretations, and thoughts in a journal forced me expose significant and meaningful elements of my thought processes that might have been otherwise lost. The reflexive process of journaling after each interview forced me to reveal my interpretations and prompt me to consider whether they were skewed to my own experiences and therefore not an accurate representation of the participants' stories and meanings

(Torres, 2003). The journal created an audit trail about experiences, opinions, thoughts, and feelings I had during the data analysis phase. Reflective journaling made visible my own critical self-reflection, thereby improving transparency of my research process (Ortlipp, 2008). Furthermore, a reflective journal helped me to reduce bias and improve triangulation of my data. Triangulation is a research strategy used to obtain corroborating evidence, by cross-checking information and conclusions thereby enhancing the confirmability of research findings (Onwuegbuzie & Leech, 2007, p. 239). When data sources agree, it is called corroboration or convergence. When data sources disagree, it is called divergence (Johnson & Christensen, 2017). I discuss data source convergences and divergences in Chapter Five.

Reflexivity. Making assumptions with my data can damage the trustworthiness of my analysis. Reflexivity involves questioning my assumptions. This strategy is characterized by continual self-awareness and critical self-reflection on the researcher's perspective, assumptions, biases, predispositions, and actions (Mills et al., 2010). The influence of these characteristics must be considered in terms of their impact to my interpretations and conclusions about the data, admitting how my background may shape the direction of the study (Creswell, 2014). Continual self-awareness and critical self-reflection required that I maintain reflexive consciousness about my own perspective, and that I consider my own positionality within the study. I reflect on my positionality in the next section.

Positionality Reflection

In my role as the researcher, I did not wish to actively look only for evidence that supports the hypothesis that peer mentors affect sense of belonging in community college students. My intent was to let the experiences and perceptions of students tell the story, whether favorable or unfavorable to the hypothesis. John Creswell (2014) described the researcher's role

and identified ways in which one may improve his or her ability to perform the interpretive activities of qualitative research. Creswell emphasized the importance for the researcher to identify and disclose all experiences with and connections to the research problem, participants, and setting, and to make explicit any information that may potentially shape my interpretations during the research process. Additionally, a researcher's social and societal locations influence the way he or she views and interprets the world (Jacobson & Mustafa, 2019). Trustworthiness of the study is improved by the disclosure of certain aspects of my social identity and journal reflections provided an audit trail and allowed me to capture my assumptions, interpretations, and thoughts.

Connection to the setting. "Backyard" research (Glesne & Peshkin, 1992) is a term used to describe studies of environments that, and participants who, are close to the researcher, such as the researcher's own organization. Creswell (2014) advised that this can lead to compromises in the researcher's ability to disclose certain information. I conducted this study at the institution where I work and I disclosed in Chapter Four all information that is pertinent to my study and withheld nothing that may have influenced my assumptions, analyses, interpretations, and conclusions.

Connection to the research problem. I am actively involved in the quality enhancement plan at my institution, for which the peer mentor program was implemented. I serve on the advisory committee and I have interest in the program's success. Thus, I may have been tempted to undertake my research with the presumption that all peer mentor relationships improve sense of belonging in community college students. It was important that I remained vigilant against this temptation and eliminate such biased thinking from my approach.

Connection to the participants. Although the frequency of personal contact between participants (mentees) and myself is extremely low, I am actively involved with the peer mentor program at my institution. I served as one of two peer mentor trainers in 2019, and I assisted with creating the training content. Relative to the mentees, I hosted two campus events to which mentees were invited and conducted a workshop in one mentee cohort classroom. Therefore, I have personally interacted with students in the participant pool from which participants were selected. In making these statements, I have attempted to recognize, and make explicit, the connections between myself and participants which may influence my interpretations.

Social identity. The act of clarifying ambiguities about our social identities enables researchers to perform reflexive research, thereby strengthening the trustworthiness of a study. Jacobson and Mustafa (2019) created a tool that researchers can use to map their social identities. The intention of the map is to provide researchers with a tool that enables them to take abstract ideas of positionality, visualize them, and understand them in relation to their interpretations. As I completed the social identity map, I noticed several aspects of my own social identity which may cause me to favor certain themes and create biased conclusions. One is my generation—having been born in 1965, I joined Generation X at its inception. Some characteristics of my generation are independence, resourcefulness, and self-sufficiency. I had to consider that if a participant's generational characteristics are radically different from mine, my preconceptions of his or her generation may influence my interpretations. Jacobson and Mustafa (2019) identified additional aspects of social identity of which I remained cognizant during the research process of my race (White), class (middle), ability (able), citizenship (U.S.), gender (cis male), and sexual orientation (heterosexual). I remained self-aware of how these characteristics could influence my decisions further, which strengthened the trustworthiness of my study.

Summary

This chapter outlined and defined the research methods I used to explore the perceptions and experiences of student mentee participants in a peer mentor program. I discussed the multi-dimensional aspects of sense of belonging and drew attention to the importance of distinguishing among locations and situations where students' sense of belonging might be affected by peer mentoring. I introduced the research question, discussed the research design, and provided pertinent characteristics of the participants. The chapter includes a detailed description of data collection and analysis processes, trustworthiness, and positionality reflection. In the next chapter, I will present the findings of the study.

Chapter 4: Findings

This chapter contains the results of the qualitative study that I conducted to answer the research question: What are community college students' perceptions of the effect of peer mentoring on their sense of belonging in college? Chapter Four also contains discussion to show my analytical approach was consistent with the framework above. A detailed description of my analytic process is also presented. I conducted three phases of coding: open, axial, and selective. This process enabled me to identify concepts and interconnecting categories, and to relate the identified categories to themes in the literature and my conceptual model, the influence of peer mentoring on sense of belonging in college. Finally, I organized data and excerpts from the individual interviews in tables to emphasize and support key themes.

Participants

I studied the responses of three participants, who were volunteers, at a large community college in Florida. This was a unique group of students who were not ready for college level course work, at high risk for academic failure, and who opted out of recommended remediation. Mentoring is more critical for these students and therefore the reason the steering committee included peer mentoring as a component of the QEP. When I proposed this study, I stated that my goal was to interview at least three participants to gain multiple perspectives and to obtain enough data to answer my research question. Since only three students responded to my request for volunteers, I interviewed each of them. The participants exhibited the following characteristics: community college student during 2019-2020 academic year, flexible opt-out

student, attended NFS support classes, mentored by a peer, and self-identified with at least one of the exemplar criteria. At the time of the interviews, all participants were between the ages of nineteen and twenty-eight.

Participant 1 (P1). At the time of the interview, P1 was twenty-eight years old. Based only on my observations during the video interview, P1 appeared to be a White male. He was a freshman in the online cohort of NFS and had recently begun taking classes in a Cybersecurity Certificate program.

Participant 2 (P2). At the time of the interview, P2 was twenty years old, in his second year of college, and taking classes in a Digital Media A.S. program. Solely based on my observations during the interview, P2 appeared to be a Black male. P2 was assigned to the online NFS cohort.

Participant 3 (P3). At the time of the interview, P3 was a nineteen-year-old freshman in one of the in-person NFS cohorts. Solely based on my observations during the video interview, P3 appeared to be a Black female. She had recently begun taking classes in an Emergency Medical Services A.S. degree program.

P1 and P2 self-identified with seven of the eight exemplar criteria (Table 1), while P3 self-identified with one of the eight criteria.

Table 1. Mentee self-identification with exemplar criteria

Exemplar criteria	P1	P2	P3
A. Your mentor established a positive and personal relationship with you.	X	X	
B. You received regular interaction and consistent support from your mentor.	X	X	
C. Your mentor contacted you at least three times throughout the semester.	X		X
D. Your mentor helped connect you to faculty.		X	
E. Your mentor helped connect you to resources.	X	X	
F. Your mentor encouraged your involvement in student events, activities, or organizations.	X	X	
G. Your mentor modeled successful student practices.	X	X	
H. Your mentor contributed to your academic success.	X	X	

Exemplar sampling rests on evidence of high levels of specific criteria to be included in an exemplar study. While P3 self-reported only one criterion, she was originally interview for the study because she met the minimum threshold of identifying with at least one exemplar criterion. Subsequently, she provided examples of identification with additional criteria during her interview and gave evidence of her exemplar status that suggested that her data should be used in the analyses and findings of the study. I include a discussion of the findings of participant self-identified exemplar criteria in Chapter Five.

Data Collection

The three interviews with mentees from the 2019 NFS class served as the primary source of research data. I conducted the three interviews using the Zoom video conferencing platform, using Zoom’s recording feature to record interview video and audio. Another useful tool of the Zoom application is the automated audio transcription feature. While this feature saved a great deal of time by handling the bulk of the transcription work, manual editing was necessary where the automated process produced incorrect transcriptions. I took the time to listen to the interviews and carefully review the transcriptions for accuracy, making corrections as I worked

through the recordings. When I became satisfied that the transcriptions were correct and accurate, I loaded the text into a qualitative data analysis software program for coding and analysis.

I chose the Dedoose software because I had prior experience using the program and I knew its basic functionality was sufficient to accomplish the work of this study. After loading the text files into Dedoose, I highlighted portions of text and attached my custom codes to each portion. As I worked through multiple iterations of analysis, the program's editing features made it relatively easy to modify codes and reorganize them hierarchically.

Data Analysis

After transcribing each interview, I coded the data and reviewed it, looking for themes and selecting those that answer my research question (Taylor & Ussher, 2001). I manually coded each line of transcribed text and identified 832 pieces of codable data in the three interview transcripts. Reviewing the codable data, I found that approximately 49% came from the first (P1) interview transcript, including 407 pieces. I identified 303 pieces of codable data in the second (P2) interview transcript, comprising approximately 36% of the sum. Finally, 122 pieces of codable came from the third (P3) interview transcript, comprising approximately 15% of the sum of coded data. The following sections include summaries of each stage of the coding process, analysis, and contextualization of the data in relation to themes found therein.

Codes and Themes

To make transparent my decisions and assumptions during the analysis process I created a frequency table (Table 2) that illustrates the frequency of the codes across the three participants. While I identified 832 pieces of codable data, only a portion were useful in determining the three key themes—peer mentors increase connectedness, reinforce engagement,

and improve transition. The table includes the frequency of participant responses that resulted in codes from which I developed into the themes.

Table 2. Frequency of participant responses by theme and deductive codes

Themes	Deductive Codes	Frequency of Response		
		P1	P2	P3
Peer mentors increase connectedness.				
	Connection to people	4	3	0
	Connection to institution	5	5	1
	Institutional acceptance	3	3	2
	Mentor's actions/influence to connect	7	3	2
	Peer belonging	3	4	2
	Relationship	6	5	3
Peer mentors reinforce engagement.				
	Academic engagement/involvement	3	4	0
	Mentor's actions/influence to engage	3	6	3
	Social engagement/involvement	2	4	1
Peer mentors improve transition.				
	Feelings: anonymous, anxious, insecure, isolated	4	1	1
	Mentor's actions/influence on transition	9	4	4
	Support	11	5	3

At the outset of each coding phase, I created deductive codes (Miles, Huberman, & Saldana, 2013). These are codes that I anticipated seeing in the data, based upon the literature, my theoretical framework, and research question. As I read and reread the transcripts, I recognized unanticipated themes, worthy of inductive codes. I worked through iterative cycles of deduction and induction until all relevant data was coded. I identified both deductive and inductive codes during the open and axial coding phases, which informed the application of deductive codes during the selective coding phase.

Open coding. During the open coding process, I generally attached concepts and phenomena to the observed data (Allen, 2017) and assigned codes to chunks of data. I generated four broad deductive codes before undertaking any coding and identified three broad inductive codes as I worked through this phase. Descriptions of these codes are found in Table 2.

Table 3. Open codes

Deductive	Description
Biographical	Details and background about the mentee's life
General freshman experience	Participant's experiences during the first year of college
Peer mentor	Related to peer mentor and mentoring program
Transition	Related to adjustment and transition to college
Inductive	Description
Feelings	Related to participant's personal feelings or emotions
N4S	Related to Neighborhoods for Success program
Zoom/online	Related to online learning

Axial coding. Next, I looked for interconnecting categories using axial coding to determine if there are any data that fit into my theoretical model. Axial coding enabled me to identify the characteristics or phenomena around which differences in properties or dimensions exist and build connections between data (Allen, 2017; Mills et al., 2010). For example, during the open coding phase, I identified the characteristic of feelings and I began to recognize ways in which the data surrounding participants' feelings fit into my theoretical model. During the axial phase, I added properties to the inductive open code and applied it as a deductive code. I gleaned the properties for the deductive axial code from the literature—in this case, freshmen often feel anonymous, insecure, and isolated (Hockings, 2005; Mann, 2001). I generated six broad deductive axial codes before coding and four broad inductive axial codes as I worked through the transcripts. Descriptions of these codes are found in Table 4.

Table 4. Axial codes

Deductive codes	Description
Academic	Related to education and the college's academic community
Feel anonymous, anxious, insecure, isolated	Students often feel this way
Involvement	Related to the college community; academic and social, extracurricular and cocurricular
Mentor actions	Any action taken by the mentor and observed by the mentee
Relationship	Related to feelings about the mentoring relationship
Transition	Related to adjustment and transition to college, distinguishing between academic and social
Inductive codes	Description
Approachable	Mentor was approachable, friendly, warm
Communication	Between student and faculty/mentor/peer/staff
Motivation	Participant's motivation, regardless of source
Tutor	Participant used tutoring services

Selective coding. I used the selective coding phase to identify data that related to the categories and themes in my theoretical model, focusing only on the most relevant categories. I identified patterned meanings across the dataset that provided possible answers to my research question. I took a realist or essentialist approach as I focused on reporting an assumed reality evident in the data; the assumed reality being that peer mentoring affects sense of belonging. I held the expectation that I would identify this phenomenon within the data. Consequently, I began this phase by generating deductive selective codes derived from previous coding and analysis phases. Descriptions of these codes and the themes generated from this phase are found in Table 5.

Table 5. Selective codes

Deductive codes	Themes from the data
Connection to people Connection to institution Institutional acceptance Mentor's actions/influence to connect Peer belonging Relationship	Peer mentors increase connectedness
Academic engagement/involvement Mentor's actions/influence to engage Social engagement/involvement	Peer mentors reinforce engagement
Feelings: anonymous, anxious, insecure, isolated Mentor's actions/influence on transition Support	Peer mentors improve transition

Contextualizing Data within Themes

I identified three themes in the data relative to peer mentors' influence on sense of belonging in college. The first theme was peer mentors increase connectedness. Secondly, peer mentors reinforce engagement in college. Third, peer mentors improve transition. In the following sections, I have organized my analysis in the three themes.

Peer Mentors Increase Connectedness

The first theme came from participant perceptions and experiences surrounding their peer mentor's influence on feelings of connection to the mentor and classmates (peer belonging), and to college personnel such as administrative staff, advisors, faculty, and others (institutional acceptance). All three participants responded with positive statements about their experiences. Participants described feelings of connectedness with their mentor as well as connectedness with the college community and institution at large.

When describing his perceptions upon first meeting his mentor, P1 enthusiastically stated, “she was very like friendly, outgoing, super like approachable.” When describing his feelings of connectedness, P2 described his mentor as a “really nice person,” adding, “in the first meeting, she mentioned parts of the college you can go to get extra help.”

P1 described his mentor as being very approachable, very positive, and very motivating. Without any additional prompting, he said that he felt like he had the support that he needed. In the following excerpt, P1 described how his mentor helped him make connections to the institution:

I feel like it was good but also different. Um, so it was crazy because a lot of the courses I was taking wasn't really in relationship to the knowledge of what my peer mentor had. Being it was a certificate course, and not like the general education classes are, there were definitely some, I think, some kind of knowledge gaps. It's not like I can necessarily say like, hey, I have a question on this specific thing. It would be like just two different knowledge bases kind of clashing, um, but I think a lot of it was there was at least support and that was the biggest thing. So, if I didn't know something, it was like, hey, you know, here's the tutoring resources. Here's different resources that are coming out, um, places to go to. I couldn't really think of any like downs. There was a lot of positives with it. Yeah, I felt very warm and welcoming. Um, I feel like I had the support that was needed. I think the biggest part too is the communication was very, very well. So I felt like there was a lot of established of like these are kind of like the guidelines, like, hey, listen, you know, you can reach out to me when, whenever you need something. And to me, made me feel positive that like, hey, this is, you have a great support base here and just anyone, or not anyone but like for my mentor, just to be very

helpful with everything. To me was like a reassuring feeling if I was ever like confused or kind of overwhelmed in that aspect.... It was reassurance that you're not alone and just thrown out into an environment that you may not be unfamiliar with. With having anxious moments, I would be reassured about the different resources available within the college... Knowing the resources available, I felt confident that if I had any struggles, I could find the help I needed for different course topics.

When elaborating on his perceptions of his mentor's influence on his feelings of connection to the college, P2 offered no doubt that she influenced his feelings in a positive way, as revealed in the following excerpt:

She told us if we needed help to talk to people, and a few of those people were your instructors, mentors around the campus, leaders in certain areas such as the librarians and things. She also was a big help. But yeah, she told us to listen to, talk to other people to get help from others, and she told us who exactly to go to why to go there and stuff like that.... Having a mentor did make me feel more connected... For my entire life the word college has always been intimidating, but having someone there to help and show me that it's only as hard as you make it really helped me feel less like an outsider and more of a college student who could really accomplish something.

When his mentor provided connections to key individuals and resources, she promoted P2's interdependence in college and strengthened his connectedness with the institution. Her supportive presence provided him with meaningful feelings of connection to the college. He felt "less like an outsider," and was inspired to "accomplish something."

P3 perceived an increase in her feelings of connectedness to the institution as a result of her mentor's influence. She said that her mentor made her "feel more connected to the college

by participating in most of the events” with her. Describing her feelings of connection to her mentor, P3 said he was very welcoming, eagerly elaborating on her comment by providing examples of her mentor’s actions that made her feel welcome and connected to her mentor:

Throughout the semester he really was kind of just someone that you feel like you could come to really honestly. It wasn't like something that was like one on one, but he would be in the classroom when we went to class. He would often share his experiences with us like, I remember him speaking at some board meeting or something like that. He would often tell us about his experience and was very open.

Data support the importance of integration and connectedness within the two dimensions of sense of belonging—peer belonging and institutional acceptance. Data from all three participants revealed feelings of connectedness with their mentor, and in some cases their classmates, as well as connectedness with the college community and institution at large. Participants described their mentors as friendly, outgoing, approachable, positive, motivating, supportive, helpful, and reassuring. Data suggest connectedness was further enhanced from peer mentor interactions resulting in confidence building, reduced anxiety, reduced stress, and connections to resources, faculty, and staff.

Peer Mentors Reinforce Engagement

The second theme was generated from participant perceptions and experiences surrounding their peer mentor’s influence on their levels and types of engagement in college. Two of the three participants responded with insightful statements about their experiences in this area. Participants described instances of peer mentor influence on their academic engagement and social engagement. P1 talked about his engagement in college from the perspective of being an online student in the following:

I know with a lot of the like the Zoom meetings there was, we were all able to like explain a lot of different experiences that we had and of course, even myself like was willing to give out some of my own personal experiences from just random general life experiences that anyone may go through versus like being fresh out of high school and just getting thrown into college and it's like, alright, well I have all these courses, what do I do, and everything, and trying to have that work life balance... I don't remember the name of the position she even suggested, but um she was actively sending me different things that she saw that like I may be interested and even the instructor for the course too, she would send me things like, hey, you might be interested in this, check it.

P1's perception of his own engagement includes a willingness to share his personal experiences with others. He offered another example of his mentor's influence on his engagement in college when he described his mentor's encouragement to apply for a position. Ribera et al. (2017) found that encouraging students to participate in cocurricular activities and take on leadership roles may "help them feel connected and form important campus relationships early on in their college careers" (p. 559). P1 data support this notion. P1's interview data further revealed his perceptions about the ways in which his mentor reinforced his engagement in college:

There was a huge drive of reaching out to instructors for questions; especially if I had any issues. I necessarily didn't need a tutor, but there was a lot of mention of the tutoring resources throughout my NFS course.

P1 felt that his mentor helped him understand the importance of communication with faculty and the use of tutoring services.

P2 described two experiences when his mentor influenced his decisions to engage academically:

My mentor definitely helped me engage more academically. There were times when I didn't want to do the work at hand, but having someone there to tell me it's not that bad and explain easier ways of accomplishing the work really helped me out and encouraged me to do more because it didn't seem like as much anymore. I talked to tutors only because my mentor told me how open minded and knowledgeable they were. I was skeptical about the tutors at first because there was only about three that I knew of and they were responsible for helping everyone, but my mentor gave me the courage to talk to them and it turned out to be well worth it.

When P2 struggled to maintain motivation to complete his coursework, so his mentor introduced him to new learning strategies and helped him to change his perception about his abilities, enabling him to engage with his work and achieve greater productivity than he originally thought possible. He also gave his mentor credit for changing his mind about the use of tutoring services. At first, he was skeptical about using a tutor, but his mentor gave him courage to try the service. Furthermore, data from P2's interview also support the theme that peer mentors reinforce social engagement:

Yes, my mentor helped me engage more socially in college. My mentor told me that just because she was a mentor didn't mean she was the only one who could help. My mentor encouraged me to talk to other classmates not only about school related topics but also about what each other did in the past weekend or our hobbies, which served to create a more welcoming and friendly atmosphere.

Two of the three participants described instances of peer mentor influence on their academic and social engagement. P1's mentor encouraged him to share his own experiences with others, to apply for a position at the college, and to use tutors. P2's mentor motivated him to

look at his work in a new way, to try new learning strategies, and to use tutoring services. These interactions served to reinforce participants' academic, social, and cocurricular engagement in college.

Peer Mentors Improve Transition

Admittedly, when I asked participants to describe the ways in which their mentor affected their transition to college life, I was uncertain about the kinds of responses that I would receive. Ideas about transition encompass myriad situations and dimensions and the only thing that I could anticipate was the diversity of responses. One participant talked about the ways his mentor made his transition smoother by sharing experiences and letting him know that she would remain available to him beyond the NFS class. Another participant shared how his mentor aided in his transition from a challenging first year to a smoother second year by sharing time management strategies. The third participant pointed to her mentor's discussions about self-development as improving her transition experience. This diversity in experiences provided rich insights into a few of the situational and multidimensional aspects of the college transition experience.

The following excerpt shows how P1 described occasions when his mentor improved his transition experience:

Oh, I think it's been great! Especially hearing a lot of my mentor's experiences of, like, hey, this is how it was for me in class and this is what I've done. It was just a very like smooth, smooth transition to say like, hey, you know, even after this is over, you can still reach out to me if you need anything. And don't forget that, you know, we have these resources and even towards the end of the course.

Additionally, P1 explained how his mentor made him feel less isolated and less overwhelmed by sharing her experiences and empathizing with what he was going through during his transition to college:

I would say, like I said, very approachable, very positive, very motivating, able to relate to a lot of the situations that a lot of students go through. It's one of those, like, hey, I've been in your shoes before, I can relate to exactly what you're going through. Here's my personal experiences that I think were beneficial to not only myself but to all the other students that may have been struggling with certain assignments or certain parts of just kind of getting overwhelmed, stuff like that.

Since P2 was in his second year when he joined the program, he did not have a mentor to assist him during his traditional first year transition. When describing his first year of college, he indicated that it hadn't gone well: "I think I had one online class my first semester, and my second semester I had a lot of online classes and that didn't go too well." In his second year, P2's mentor provided peer support that was missing during his freshman year, aiding his pursuit for greater interdependence and enhancing his transition into his second year. Additionally, P2 said his mentor helped him with strategies for chunking work and time management. It seems that he took his mentor's advice to heart, allowing it to shape his perception of transitional support from his first to second year:

She helped me understand that large amounts of work don't mean large amounts of stress. That was probably the biggest thing I took from talking to, you know, going through the courses with her and stuff is that just because there's a lot of work to do doesn't mean you have to freak out about it. You can cut it up into pieces. Time management. She always

talked about time and time management is the greatest thing you could ever master in college. So, she was really good about that.

Due to the circumstance that I am familiar with the NFS 1000 course content, I recognized that P2's mentor was supporting at least one of the student success strategies promoted in the class: time management.

The interview with P3 provided insight to the way in which she perceives that her peer mentor aided in her transition to college:

Well the class overall was very effective. Teaching us self-development that we had to go through during that semester, it helped me realize a lot of things about myself and things that I can improve on. But he himself, he was also is helpful as well. He kind of was an inspiration to how you should you know carry yourself in school, to grades, how to speak, how to dress, you know, just overall self-development.

P3's mentor appears to have been supporting the general purpose of the NFS 1000 class, self-development, which is a significant part of successful college. The participant was last mentored during the spring of 2020 and approximately three months passed before the interview. The ways in which the mentor "inspired" P3 during her transition were meaningful enough to have made an impression on her. Her mentor's inspiration toward self-development played a part in her transition experience.

The data illuminate some of the reasons why peer mentoring programs are viewed as an indispensable feature of effective transition programs. By sharing experiences, remaining available, disseminating success strategies, and aiding in self-development peer mentors positively influenced participants' perceptions of their transition experiences.

Since this study's primary focus is students' feelings of belonging, I believe it is important to identify connections between the themes and participants' feelings. The first theme—peer mentors increase connectedness—is characterized by students' feelings associated with their sense of belonging. During the interviews, participants conveyed positive feelings about their experiences with connectedness to faculty, mentors, peers, tutors, and the institution. Initially, one might presume the other two themes—peer mentors reinforce engagement and improve transition—to be strictly transactional. Nonetheless, from the passionate inflection in their voices and the earnest way in which participants spoke about their engagement and transition experiences, I sensed that they held strong positive feelings about their mentors' effect on their sense of belonging within all three themes.

While I expected to see a theme generated from the data collected from the sixth interview prompt—do you feel like you belong at the college—participant responses were insufficient in rich detail to support a separate theme. However, the findings of this study suggest the three key themes identified are associated with students' feelings of belonging at the college. Therefore, a separate theme is unnecessary.

Summary

The purpose of this chapter was to organize the raw data into logical, meaningful categories. The challenge of this chapter was to find a way to communicate my interpretation to others. Using an essentialist or realist approach during the analysis phase of the research, I focused on reporting an assumed reality, evident in the data, that peer mentoring affects sense of belonging. Primarily, I utilized deductive codes and held the expectation that I would identify this phenomenon within the data. My analysis of the data yielded characteristics, categories, and themes, which support theories about the importance of sense of belonging and peer

mentoring's influence on sense of belonging in college. I included individual participant responses in my analysis to highlight their unique experiences and perspectives relative to each primary theme. I discuss my findings in the next chapter.

Chapter 5: Conclusion

The purpose of this qualitative study is to explore college students' perceptions of how peer mentor relationships affect their sense of belonging. This chapter includes discussion of major findings in relation to the literature on peer mentoring and sense of belonging as well as implications for those interested in the association between peer mentor actions and the development of sense of belonging in mentees. I conclude this chapter with a discussion of the future research possibilities, limitations of the study, and a brief conclusion.

This chapter includes discussion and future research possibilities to help answer the research question: What are community college students' perceptions of the effect of peer mentoring on their sense of belonging in college? I identified three primary themes in which the data could be categorized as peer mentors: increase feelings of connectedness, reinforce engagement in college, improve transition to college, and strengthen peer belonging and institutional acceptance. For the participants in this study, the aggregate effect of these mentor-influenced factors (themes) was improved sense of belonging in college.

Interpretations of the Findings

My analysis of the participant data produced three primary themes that support the theoretical framework. I have highlighted participants' unique experiences and perspectives relative to each theme. Each theme is described in detail, accompanied by literature and my interpretations, in the following sections.

Peer Mentors Increase Connectedness

All three participants responded with positive experiences which included characteristics of this theme. Yomtov et al. (2017) found that mentored students reported significant feelings of connection to their institution. They explained when compared with non-mentored students, mentored students “felt a significantly stronger positive connection to the university” (Yomtov et al., 2017, p. 32). The data from this study support Yomtov’s findings. Participant responses describe ways in which their mentors initiated friendly and welcoming interactions and worked to build relationships and connections between themselves and the college. When describing their mentors, participants used language including friendly, approachable, open, and willing to share his experiences. Data from participant responses suggest that when the mentors modeled these characteristics, participants’ feelings of connectedness to the mentor (peer belonging) increased. In other instances, participants perceived increased feelings of connectedness to the institution because of their mentors’ influence.

Andrews & Clark (2011) found when peer mentors are engaged with mentees early in their college journey, they abated mentees’ anxiety and increase feelings of connectedness. P1 used several phrases, which illuminate his feelings of connectedness: “...reassurance that you're not alone...;” “...support... was the biggest thing;” “I feel like I had the support...;” “...made me feel positive...;” and “...a great support base...” He spoke of ways in which his mentor reduced his level of anxiety in college:

It was reassurance that you're not alone and just thrown out into an environment that you may not be familiar with. With having anxious moments, I would be reassured about the different resources available within the college.

By offering P1 reassurances and helping him recognize that he was not alone in facing things in an unfamiliar environment his mentor reduced his anxiety and increased his feelings of connectedness. Findings in the study from Andrews and Clark (2011) include the distinction between two sources of anxiety in new college students—academics and making friends. They found that the majority of new students felt less anxious about academic pressures than the social aspects of college. The findings from this study build on the previous research by adding P1’s cocurricular sources of anxiety—unfamiliar environment and availability of resources.

P2 and P3 offered similar experiences of improved connectedness—to peers and to the institution. Ribera et al. (2017) found “members of the campus community, such as faculty, student affairs professionals, and administrators ... play an important role in cultivating a sense of connectedness and a feeling of value.” Data from all three participants support the findings from Ribera et al.

Peer Mentors Reinforce Engagement

Rieske & Benjamin (2015) theorized a supportive relationship which enhances a student’s sense of belonging has the potential to improve that student’s academic and social engagement within the college student experience. Yomtov et al. (2017) found that when compared with non-mentored students, mentored students “felt significantly more active at school.” Offering a stronger statement, Egege & Kutieleh (2015) purported peer mentoring to be the single most effective strategy for increasing student engagement and improving the freshman experience. The responses from all three participants contain characteristics of supportive peer mentor relationships that reinforce engagement, corroborating with the findings described by Yomtov et al. (2017) and Egege & Kutieleh (2015).

P1 described experiences when his own engagement included a willingness to share his personal experiences with others. His mentor encouraged him to apply for a position, which he perceived to be a way in which his mentor further reinforced his engagement in college. P1 felt that his mentor helped him understand the importance of communication with faculty and the use of tutoring services. P2 stated in no uncertain terms that the relationship with his mentor improved his level of engagement academically. Like P1, P2 cited an example of his mentor's encouragement to utilize tutors for assistance, reinforcing his academic engagement. Additionally, P2 stated that his mentor helped him engage more socially in college by encouraging him to talk to other classmates about non-academic topics, "which served to create a more welcoming and friendly atmosphere."

While the literature does highlight the importance of inclusive and welcoming spaces on campus (Hurtado, 2000; Hurtado & Carter, 1997) the literature does not include mention of peer mentors specifically promoting a welcoming and friendly atmosphere. The data here are an example of the ways in which this study illuminates associations between peer mentors' actions and participants' behaviors and perceptions. The mentor influenced P2's behavior to talk to classmates resulting in feelings of welcome and friendliness.

It is crucial for new students to be academically and socially engaged with the college community (Astin, 1984; Tinto, 1975, 1973). Findings from Egege's & Kutieleh's (2015) study indicate that a lack of engagement can reduce sense of belonging, which reduces their likelihood of seeking assistance from the college community. The well mentored participants in this study felt improvement in engagement and sense of belonging, and reported instances of seeking the assistance from faculty, mentors, and tutors.

Peer Mentors Improve Transition

Much of student success in higher education is linked to the support that they receive as they transition to and during the first year of college (Andrews & Clark, 2011; Hurtado & Carter, 1997; Ribera et al., 2017). Data from this study suggest the peer mentors provided at least some of the support students need to perceive improved transition experiences. P1 and P3 perceived improved transitions to college and P2 perceived improved transition from his first to second year.

HEIs create orientation programs designed to improve transition and reduce feelings of isolation and insecurity (Kift, 2004). One of the most common interventions used to facilitate this process is mentoring (Egege & Kutieleh, 2015). P1 explained how his mentor made him feel less isolated and less overwhelmed by sharing her experiences and empathizing with what he was going through during his transition to college. P2's mentor provided connections to key individuals and resources, aiding in his continued transition into his second year. The data from P2 support the notion that peer mentors not only help students transition to college, but also aid in other transitional periods common to the college student experience. Not only did Andrews and Clark (2011) find peer mentoring to be effective in smoothing transitions for new college students, but they also found they can provide on-going support, often lasting beyond the first term. The findings from P2's data support the findings by Andrews and Clark. P3 described her peer mentor's influence over her self-development during her transition to college as inspirational.

In a comparison study between two UK universities Collings, Swanson, & Watkins (2014) found that mentoring buffers the effect of transition to college. Conducting a qualitative study at another UK university Hill and Reddy (2007) found that peer mentors aided in students'

transition to college by offering practical, academic, and personal support. The findings in the present study add to the findings in the previous studies in support of the notion that peer mentors improve transition.

Peer Mentors as Facilitators of Sense of Belonging

An important component of the theoretical framework for this study is the idea that students' perceived connectedness (first theme) to peers and to the college is significant to their sense of belonging in college. There is a gap in the current literature that this study begins to fill—exploration and exposure of the associations between peer mentoring and sense of belonging. We need to better understand the ways in which peer mentor interactions and relationships influence peer belonging and institutional acceptance. Strayhorn (2012) found that the quality of interactions students experience in the college setting—with faculty, staff members, and peers—is fundamental to a student's ability to establish meaningful relationships. Peer mentor relationships can strengthen students' commitments, connections, and consequently, retention (Strayhorn, 2012). Participant responses include experiences and perceptions of their relationships with their mentors and their mentors' influence on sense of belonging within the two dimensions of peer belonging and institutional acceptance. Data surrounding these dimensions appear in the three themes: participants' feelings of connectedness, levels of engagement, and transition to college. The data in these themes suggest that peer mentors positively influenced both dimensions and therefore overall sense of belonging for the participants in this study. These findings highlight a significant accomplishment for the college's peer mentor program and the QEP. This study suggests students experienced a lift in sense of belonging that would not normally be present during the first or possibly even the

second year. As a result of their mentors' influence, participants developed feelings of belonging early in their academic careers, before completion of their first academic year.

Data from the three participants suggest that actions taken by the peer mentors increased participants' feelings of connectedness, with their peers as well as with the college. P1's mentor helped him make connections with faculty, support personnel, and other resources—"I felt confident that if I had any struggles, I could find the help I needed..." P2's mentor increased his institutional acceptance by making him feel "less like an outsider and more of a college student who could really accomplish something." P3 perceived increased institutional acceptance when participating in campus events recommended by her peer.

Participant responses also include experiences and perceptions of sense of belonging in terms of their engagement in college (second theme). P1 felt that his mentor helped him understand the importance of communication with faculty and the use of tutoring services. As a result, he felt academically engaged with the college community. P2 experienced greater academic and social engagement due to his mentor's influence. Academically, P2's mentor encouraged him to become more engaged and "do more" regarding his coursework and suggested learning strategies to make the work easier. Additionally, P2 credited his mentor's influence for alleviating his skepticism about tutors and prompting him to use their services. Furthermore, P2 reported increased social engagement after his mentor encouraged him to talk with classmates about school, hobbies, and other items of interest (peer belonging).

Another important component to the theoretical framework for this study is the idea that peer mentors improve transition (third theme), which enhances students' sense of belonging in college. P1 perceived a smoother transition to college when his mentor shared her experiences with him and offered her continued support beyond the two-semester NFS support class. P3 also

held perceptions of an improved transition experience due to her mentor's influence. Her mentor "inspired" her toward continued self-development, which she believed improved her transition during the first year of college.

Exemplar Criteria

The purpose of asking participants to self-identify with at least one of the exemplar criteria was to ensure that I included only participants who exhibited at least one attribute of a well mentored student. Another benefit to using exemplar criteria was that it set the expectation that the interview would include questions and prompts that address those criteria. Participants had some idea of what they might be asked about. Additionally, since the participants in this study represent examples of well mentored students, the findings from this study are sufficient to describe individuals' experiences and perceptions resulting from their peer mentor's influence. By studying exemplars, I was able to gain a rich and deep understanding of the experiences of well mentored students.

The exemplar criteria with which participants identified represent participants' initial perceptions about whether they were well mentored. While the exemplar criteria represent requirements of the college's QEP, they also represent peer mentor practices that support sense of belonging. When comparing participants' self-identification with exemplar criteria, I made three findings. First, since P1 and P2 were in the same class, and only one mentor was assigned to each class, both participants were mentored by the same peer. P3 was mentored by a different peer. Second, there is a great disparity between P3's responses and the responses from the two other participants in the study. Third, in some instances, participants' interview responses tell a different story from their initial identification with exemplar criteria.

P1 and P2 self-identified with seven of the eight exemplar criteria (Table 1), while P3 self-identified with one of the eight criteria. It cannot be inferred from Table 1 data alone that P1 and P2 had a better mentoring experience than P3. It was not the purpose of this study to examine differences among mentoring relationships using exemplar criteria, and Table 1 alone does not provide enough data to study this phenomenon. However, when I compared Table 1 data to participant interview responses, I found divergences in the responses from each participant. For example, P1 did not identify with the criterion, *your mentor helped connect you to faculty*. Yet, he described several instances when his mentor promoted his connections to faculty. P2 did not identify with the criterion, *your mentor contacted you at least three times throughout the semester*. In his case, the mentor contacted him twice outside of class. When comparing Table 1 data to interview data for P3 I found two divergences. P3 did not identify with the criterion, *your mentor established a positive and personal relationship with you*. Yet, she described her mentor as “very welcoming” and “he really was kind of just someone that you feel like you could come to.” Even if P3 did not feel that this was a personal relationship, her description indicates that she perceived their interactions to be positive in nature. Additionally, P3 did not identify with the criterion, *your mentor modeled successful student practices*. However, P3 perceived her mentor to be inspirational when sharing his accomplishments. These examples illustrate the notion that, within this study, the participant interview data set is richer source for indications of the well mentored construct than is the set of exemplar criteria in Table 1. These examples also raise awareness that the students themselves might not recognize those markers even when they have occurred.

Interview data showed no significant differences—regarding perceptions of their mentor’s influence on sense of belonging—between data from the exemplars who identified with

seven of the eight criteria versus the one who identified with only one criterion. This suggests that peer mentor programs should include practices designed to promote every possible positive connection for students—to peers, faculty, staff, resources, the college community, and the institution. Leaders of new and existing mentoring programs can accomplish this by reviewing studies such as this one to identify practices that can be supported and that will work within their setting. Peer mentors must be trained, empowered, and enabled to conduct activities that build connections between mentees and themselves; build connections between students and the institution; engage students in the college community; and support positive, successful transitions to the new learning environment.

Reflexive Journal

The act of capturing my assumptions, interpretations, and thoughts in a journal forced me to expose my thought processes and prompted me to consider whether they were an accurate representation of participants' stories and meanings (Torres, 2003). The journal created an audit trail about experiences, opinions, thoughts, and feelings I had during the data analysis phase. The process of critical self-reflection improved transparency of my research process (Ortlipp, 2008). For example, I identified an example of my own bias in a journal entry after my interview with P3. This journal entry was specific to her negative response to the question about whether she felt her mentor played a part in her sense of belonging. When she replied, "honestly, I can't say so, no," I immediately felt fearful that her mentor may not have affected her sense of belonging. I wrote, "I recognize my own propensity to expect participants to affirm the assumption that sense of belonging is influenced by peer mentoring. Not only that, but I expected participants to affirm this with positive examples of influence. Conversely, when the other two participants responded with positive examples of influence on their sense of belonging,

I wrote that I felt relieved to hear them respond in ways that supported my assumption. It was enlightening for me to use the journal to capture my own biased emotional responses to participants. These types of journal entries prompted me back toward objectivity. My goal was to analyze ways in which peer mentors influence sense of belonging in mentees, regardless of positive or negative polarity. The reflective journal also helped me to improve triangulation by cross-checking information and conclusions. Generally, there was convergence between journal data and interview data. One early journal entry, which was convergent with interview data, included my thoughts about the relationship between P1 and his mentor. In this instance, I had written, “P1 liked his mentor = positive feelings/relationship.” When I began coding the transcript, and more closely examined P1’s responses, I saw that he described her as friendly, outgoing, approachable, and motivating. He said she made him feel like he wasn’t alone. Descriptions such as these from participant data corroborate my initial impression that P1 held positive feelings about the relationship with his mentor. The journal entries contained no data that diverged from that of the interviews.

Implications for Practice

“A committed, skilled and knowledgeable mentor contributes to a positive new student experience” (Loane, 2015, p. 36). In the United Kingdom, Collings et al. (2014) found that peer mentored students showed higher levels of integration to college than non-peer mentored students. Furthermore, their study indicated mentoring cushions the effect of transition to college. Two years later, in Australia, Cornelius, Wood, and Lai (2016) published a study with similar results, indicating students who completed a peer mentor program had positive transition experiences and became more engaged and integrated into the university (Cornelius, et al., 2016). Since the participants in the present study did not include non-peer mentored students a

comparison between mentored and non-mentored students cannot be made, as in the UK study. However, the findings in the present study support the UK study's implication that peer mentoring moderates transition to college, and suggest that mentoring is beneficial when continued beyond the first semester or two. Additionally, the findings presented in this study support the implications of the Australian study.

For those interested in improving peer mentor and first year programs, it is vital to understand the association between the peer mentor practices and the development of sense of belonging in mentees. When we identify the types of practices that have the best chances to improve sense of belonging, we can include those practices in peer mentor training programs. In practical application, peer mentors provide support and guidance to students while attending college. When mentors take on active roles in mentees' college life, and become part of their educational environment, mentees' behavior and growth are influenced. Results in the study of 304 freshmen (mentored and non-mentored) by Yomtov et. al (2012) suggested mentored students felt more integrated, supported, and felt a strong connection to their institution. The findings in the present study—surrounding connectedness, engagement, and transition—build on the implications from the study conducted by Yomtov et al., adding the peer mentor as an agent of influence in these areas.

To capitalize on the findings from this study and other relevant studies and theories mentioned herein, HEIs need to emphasize practices that promote sense of belonging in their students, especially for high-risk populations. To accomplish this, institutional leaders must invest in their most valuable resource—their students. Aside from the benefits to the institution, peer mentor programs benefit both student mentees and student mentors. A carefully designed and properly maintained peer mentor program can provide vulnerable new students the much-

needed peer connection to the college and create leadership opportunities for experienced students who have a desire to serve and grow. For the participants in this study, findings suggest peer mentors influence sense of belonging by increasing connectedness, reinforcing engagement, and improving transition.

Future Research

One recommendation for future research is a mixed methods study using a much larger number of participants. Qualitative research is subjective and the tools, such as interviews, are designed to explore nuanced perceptions and experiences. Quantitative research is objective and the tools, such as surveys, have the potential to explore hard data on a large scale. For this subject matter, a mixed methods approach using a large sample size may yield more convincing findings and results than a qualitative approach alone.

I designed this study to illuminate experiences and perceptions of well mentored students. I did not make it my intention to closely examine the peer mentor practices that influenced the participants' sense of belonging, although their actions and activities were exposed in some degree in the details of my findings. I recommend future researchers study specific peer mentor practices that influence (positively and negatively) sense of belonging in college students. While studies have catalogued peer mentor activities and practices that promote student success, there is a gap in the research regarding the identification of mentoring activities that specifically influence sense of belonging.

Mentors take on active roles in mentees' college life, becoming integral to their educational environment. Rather than assume common peer mentor practices improve sense of belonging, a study whereby those mentor practices are made explicit would improve the literature. Attention should be paid to the multidimensional and situational aspects of belonging

to ensure comprehensive set of peer mentor best practices can be derived. By improving understanding of these critical aspects of belonging, institutional leaders can design effective peer mentor programs and evaluate peer mentor interventions relative to their ability to promote sense of belonging. Additional scholarly research in these areas will provide the encouragement and support program leaders need to build peer mentor programs that promote sense of belonging.

Future research should focus on how peer mentoring affects other groups of students. Exceptional students, first time in college, and international students represent additional student populations who benefit from relationships with peer mentors early in their academic careers. Furthermore, future researchers should study differences among peer mentored groups. For example, how mentee experiences differ between a high-risk population and a college-ready population of students. Future researchers interested in the effect of peer mentoring on sense of belonging should compare student experiences from different types institutions. Mentoring outcomes may be different between technical institutes and universities, or all-female and all-male colleges. Finally, studies should be conducted to investigate negative student experiences and perceptions of peer mentoring's effect on their sense of belonging. Armed with knowledge of peer mentor practices and behaviors that effect belonging negatively, institutional leaders can address these as actions to prevent against in peer mentor training programs.

Conclusion

The purpose of this study was to explore college students' perceptions of how peer mentor relationships affect their sense of belonging. What current research has failed to adequately explore—the associations between peer mentoring and sense of belonging—I

endeavored to with this study. I examined this phenomenon using a theoretical framework built on research-backed concepts of student development, peer mentoring, and sense of belonging. Strayhorn framed sense of belonging “as a basic human need and motivation, sufficient to influence behavior” (Strayhorn, 2012, p. 17). The findings from this study suggest that peer mentors meet this basic human need thereby influencing mentees’ behavior, confirming Strayhorn’s assertion. Furthermore, Strayhorn (2012) claimed, “factors exist which influence students’ sense of belonging.” Findings from this study support Strayhorn’s second claim and demonstrate that peer mentors can be included in the list of such influential factors.

With few exceptions, all three participants credited their peer mentors with having influenced their experiences and perceptions, some directly and some indirectly, within each of the three themes. Students want to feel academically and socially connected to their college. It is important for institutional leaders to remain cognizant of this and ensure their peer mentor programs include practices that help students develop those connections. Interviews with the well mentored students in this study suggest when peer mentors behaved in accordance with the exemplar criteria, sense of belonging was improved.

Peer mentoring is an essential part of many first-year programs, providing student support and connection to the institution. College leaders and program planners should recognize the significance of the findings in this study, as well as the findings in studies mentioned herein, and use the information to develop new and improve existing peer mentor programs. The three themes produced in this study encompass factors that contribute to college students’ sense of belonging and the peer mentor’s role in the development of those feelings. Peer mentors increase connectedness, reinforce student engagement, and improve transition—all of which contribute to a student’s overall sense of belonging in college.

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Appendix B Exemplar Criteria

- A positive, personal relationship was established.
- The mentee received regular interaction and consistent support from the mentor.
- The mentor contacted the mentee at least 3 times throughout the semester.
- The mentor helped to connect the mentee to faculty.
- The mentor helped to connect the mentee to resources (e.g., staff, academic and financial support services, student organizations).
- The mentor promoted belongingness to the college by encouraging mentee involvement in college events, activities, or organizations.
- The mentor modeled successful student practices (e.g., balancing academic and social demands, engaging with faculty, and utilizing learning support resources).
- The mentor contributed to the academic success of the mentee.

Appendix C Recruitment Email to Faculty

Dear N4S Faculty Mentors and Success Coaches,

I am conducting a study of the influence of peer mentoring on freshman college students' sense of belonging at (name of college). My plan is to interview three mentees from the present Neighborhoods for Success (N4S) population of 34 students. Please consider assisting me by providing the attached study information sheet to students who exhibit at least one of the criteria listed below and can discuss in detail their experiences in a peer mentor relationship.

Faculty mentors, success coaches, and peer mentors will not be involved in data collection, will not report back any information to me, and will not have access to study data. I only request that nominators (faculty mentors and success coaches) share the study information sheet with mentored students who meet at least one of the criteria below and tell them to contact me if they are interested in participating. I will not ask nominators to share their nominations with me and I will not share with them their nominee's decision to participate in the study. As potential participants contact me to express interest in the study, I will provide the consent form with additional details of the study.

I will employ exemplar methodology to identify students who exhibit high levels of specific criteria. I designed a set of nomination criteria that captures exemplarity of well mentored students—students who were mentored in accordance with the college's QEP requirements. As you consider N4S students who may be good candidates for this study, please keep in mind the following exemplar characteristics.

- A positive, personal relationship was established.
- The mentee received regular interaction and consistent support from the mentor.
- The mentor contacted the mentee at least 3 times throughout the semester.
- The mentor helped to connect the mentee to faculty.
- The mentor helped to connect the mentee to resources (e.g., staff, academic and financial support services, student organizations).
- The mentor promoted belongingness to the college by encouraging mentee involvement in events, activities, or organizations.
- The mentor modeled successful student practices (e.g., balancing academic and social demands, engaging with faculty, and utilizing learning support resources).
- The mentor contributed to the academic success of the mentee.

Please share the attached study information sheet with your N4S students who exhibit at least one of these criteria and ask them to contact me if they would like to participate. Thank you for your thoughtful consideration.

Appendix D Study Information Sheet

You are being asked to take part in a research study called, Community College Students' Perceptions of the Effects of Peer Mentoring on Their Sense of Belonging, conducted at (name of college).

Purpose and Background. You are invited to participate in this research study which may contribute to a greater understanding of peer mentor influence on students' sense of belonging in college. You are being asked to participate because you are a student who was enrolled in an NFS 1000 course during the 2019 academic year, assigned to a peer mentor, and a volunteer of the age of 18 or older.

Study Procedures. If you take part in this study, you will be asked to participate in a one-hour interview related to your perceptions about your relationship with your peer mentor and the role you think he/she has played in your feelings of belonging in college. Interview data will not be shared with the peer mentor. The interview will be conducted and recorded by video conference, using your choice of the following HIPAA compliant video conference services: Skype for Business, Microsoft Teams, Zoom, or Google G Suite.

After you notify the PI of your desire to take part in the study, the PI will contact you to set up an agreeable meeting time for the interview. Interviews will be conducted between August 4 and August 30. Your verbal consent to participate will be requested at the beginning of the interview.

Privacy and Confidentiality. Your personal information and responses to the interview and survey will be kept strictly confidential. Faculty mentors, success coaches, and peer mentors will not be involved in data collection, will not report back any information to me, and will not have access to study data.

Compensation. For taking part in this study, you will receive a gift card in the amount of \$50.00 for your choice of Amazon, Walmart, or Target.

Participant Characteristics. Please participate only if you can self-identify as meeting at least one of the following criteria.

- Your mentor established a positive and personal relationship with you.
- You received regular interaction and consistent support from your mentor.
- Your mentor contacted you at least three times throughout the semester.
- Your mentor helped connect you to faculty.
- Your mentor helped connect you to resources (e.g., staff, academic and financial support services, student organizations).
- Your mentor encouraged your involvement in events, activities, or organizations.
- Your mentor modeled successful student practices (e.g., balancing academic and social demands, engaging with faculty, and utilizing learning support resources).
- Your mentor contributed to your academic success.

You will not be asked to disclose this information until the time of the interview and not until you have given your consent to participate in the interview.

If you would like to participate in this study or if you have questions about the research, please contact me no later than August 20, 2020.

Thank you for your thoughtful consideration.

Appendix E Recruitment Email to Students

You are being asked to take part in a research study called, Community College Student's Perceptions of the Effects of Peer Mentoring on Their Sense of Belonging, conducted at (name of college).

Purpose and Background. You are invited to participate in this research study which may contribute to a greater understanding of peer mentor influence on students' sense of belonging in college. You are being asked to participate because you are a student who was enrolled in an NFS 1000 course during the 2019 academic year, assigned to a peer mentor, and a volunteer of the age of 18 or older.

Study Procedures. If you take part in this study, you will be asked to participate in a one-hour interview related to your perceptions about your relationship with your peer mentor and the role you think he/she has played in your feelings of belonging in college. Interview data will not be shared with the peer mentor. The interview will be conducted and recorded by video conference, using your choice of the following HIPAA compliant video conference services: Skype for Business, Microsoft Teams, Zoom, or Google G Suite.

After you notify the PI of your desire to take part in the study, the PI will contact you to set up an agreeable meeting time for the interview. Interviews will be conducted between August 4 and August 30. Your verbal consent to participate will be requested at the beginning of the interview.

Privacy and Confidentiality. Your personal information and responses to the interview and survey will be kept strictly confidential. Faculty mentors, success coaches, and peer mentors will not be involved in data collection, will not report back any information to me, and will not have access to study data.

Compensation. For taking part in this study, you will receive a gift card in the amount of \$50.00 for your choice of Amazon, Walmart, or Target.

Participant Characteristics. Please participate only if you can self-identify as meeting at least one of the following criteria.

- Your mentor established a positive and personal relationship with you.
- You received regular interaction and consistent support from your mentor.
- Your mentor contacted you at least three times throughout the semester.
- Your mentor helped connect you to faculty.
- Your mentor helped connect you to resources (e.g., staff, academic and financial support services, student organizations).
- Your mentor encouraged your involvement in events, activities, or organizations.
- Your mentor modeled successful student practices (e.g., balancing academic and social demands, engaging with faculty, and utilizing learning support resources).
- Your mentor contributed to your academic success.

You will not be asked to disclose this information until the time of the interview and not until you have given your consent to participate in the interview.

If you would like to participate in this study or if you have questions about the research, please contact me no later than August 20, 2020.

Thank you for your thoughtful consideration.

Appendix F Informed Consent to Participate in Research

Pro # STUDY000449

You are being asked to take part in a research study. Research studies include only people who choose to take part. This document is called an informed consent form. Please read this information carefully and take your time making your decision.

This consent form will give you the information you will need to understand why this research study is being done and why you are being invited to participate. It will describe what you need to do to participate as well as any known risks, inconveniences, or discomforts that you may have while participating. You are encouraged to ask questions at any time. Ask the researcher to discuss this consent form with you. Please ask him to explain any words or information you do not clearly understand. If you decide to participate, you will be asked to give your verbal consent at the beginning of the interview, which will serve as a record of your agreement to participate.

You are being asked to take part in a research study called, Community College Students' Perceptions of the Effects of Peer Mentoring on Their Sense of Belonging, conducted at (name of college)

The person in charge of this research study is Bryan Sullins. This person is called the Principal Investigator (PI). He is being guided in this research by Amber Dumford.

If you are uncomfortable with any part of the study, you may contact the PI's research supervisor, Dr. Amber Dumford at 813-974-4697 and dumford@usf.edu.

Purpose and Background

You are invited to participate in this research study which may contribute to a greater understanding of peer mentor influence on students' sense of belonging in college. You are being asked to participate because you are a student who was enrolled in an NFS 1000 course during the 2019 academic year, assigned to a peer mentor, and a volunteer of the age of 18 or older.

Study Procedures

If you take part in this study, you will be asked to participate in an interview related to your perceptions about your relationship with your peer mentor and the role you think he/she has played in your feelings of belonging in college. Interview data will not be shared with the peer mentor. The interview will be scheduled for one hour, but if you would like to continue the conversation, we can go for up to one and a half hours. The interview will be conducted and recorded by video conference. You may choose from the following HIPAA compliant video conference services: Skype for Business, Microsoft Teams, Zoom, or Google G Suite.

After you notify the PI of your desire to take part in the study, he will contact you to set up an agreeable meeting time for the interview. Your verbal consent to participate will be requested at the beginning of the interview.

Beyond the initial interview, it may be necessary for the Principal Investigator to speak with you in a follow-up meeting between August and October 2020. This will give the PI the opportunity to make sure that your thoughts and perceptions are represented as accurately as possible.

Total Number of Participants

Three individuals will take part in this study.

Alternatives / Voluntary Participation / Withdrawal

You have the alternative to choose not to participate in this research study. You should only take part in this study if you want to volunteer. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study.

Compensation

For taking part in this study, you will receive a gift card in the amount of \$50.00 for your choice of Amazon, Walmart, or Target.

Benefits and Risks

You will not receive any benefits by taking part in this research study. This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study.

In completing the study online, it is possible, although unlikely, that unauthorized individuals could gain access to your responses. Confidentiality will be maintained to the degree permitted by the technology used. No guarantees can be made regarding the interception of information sent via the Internet. However, your participation in this study involves risks similar to a person's everyday use of the Internet.

Privacy and Confidentiality

Your personal information and responses to the interview and survey will be kept strictly confidential. Only certain individuals may review these records. By law, anyone who looks at your records must keep them completely confidential. The only people who will be allowed to see these records are: The Principal Investigator, The advising professor, and The University of South Florida Institutional Review Board (IRB).

Faculty mentors, success coaches, and peer mentors will not be involved in data collection, will not report back any information to me, and will not have access to study data.

What is learned from this study may be published. If so, your name will not be used. No identifying information will be published that would let people know who you are.

Contact Information

If you have questions regarding the research, please contact the Principal Investigator at bsullins1@usf.edu.

If you have any questions about your rights as a research participant, please contact the USF IRB at (813) 974-5638 or contact by email at RSCH-IRB@usf.edu.

Appendix G Interview Prompts

- 1) The first year in college can be a stressful, exciting, confusing, and frustrating time in a student's life. The purpose of our conversation is to allow you to freely discuss your experiences and your perceptions of peer mentoring during your freshman year. Since your identity is protected please feel free to share experiences whether good, bad, or meh. I have a set of questions and prompts, but let's just see where our conversation takes us. Let's begin by you simply telling me a little about yourself. It can be as much or as little as you are comfortable sharing.
- 2) Tell me about the first time you met your mentor.
- 3) What are some words or phrases you could use to describe your relationship with your mentor?
- 4) How do you feel about your relationship with your mentor?
- 5) In what ways has your mentor affected your transition to college life?
- 6) Do you feel like you belong at the college?
 - a) If yes
 - i) In what ways?
 - ii) What part did your mentor play?
 - b) If no
 - i) Discuss spaces where belonging can matter: clubs, campus/college social events, academic/social groups.
 - ii) What part did your mentor play?
- 7) What part did your mentor play in your level of involvement in college?
 - a) Class attendance

- b) Communication with instructors
 - c) Seeking leadership opportunities like Student Government Organization
- 8) Is there anything else that you would like to share with me regarding your relationship with your mentor?