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Retaining First-Generation and Pell-Eligible Students with a Near-Peer Coaching Intervention

A dissertation

presented to

the faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership, concentration in Higher Education Leadership

by

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May 2021

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Keywords: retention, near-peer, first-generation, pell-eligible

ABSTRACT

Retaining First-Generation and Pell-Eligible Students with a Near-Peer Coaching Intervention

by

Kacie Hutson

Retention has been a focus of universities and policy makers for decades. However, there is a gap in research of Pell-eligible and first-generation student retention and completion.

Researchers have indicated that peers can influence retention of other students. Using the theories of Astin (1993) and Tinto (1993) as the framework, this study explored near-peer coaching effects on retention of Pell-eligible and first-generation students. The study focused on the College Possible Catalyze program which trains near-peer coaches for partnering institutions. near-peer coaches were assigned 120 first-time full-time Pell-eligible or first-generation students at two partnering institutions. The study compared the retention of students being coached and retention of students in the same categories not coached.

A series of statistical analyses were conducted including chi-square, t-tests, and logistical regression in order to test for associations of retention of students with and without a coach, associations of GPA of students with and without a coach, and if there is a predictive association controlling for coach, Pell-eligible, and first-generation indicators. All analyses indicated a strong significance between coaching and both spring and fall retention in all groups. Students who were coached were retained at significantly higher rates than students without a coach. There was a positive significant association in GPA and coaching for both groups. Results indicated there were strong predictive association in retention controlling for Pell-eligible and

first-generation factors. The results provide clarity on programming that can directly affect first-year retention in the Pell-eligible and first-generation populations.

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DEDICATION

This study is dedicated to my parents. Thank you for your unrelenting support in everything I strive to accomplish. From early in my education, I had to work harder than most. You instilled in me the importance of learning and always provided the resources I needed to succeed. I am lucky to have parents who did whatever it took to provide access to education even when you had not completed college yourselves. Thank you for always being my cheerleaders and encouraging me to keep going. In the words of my father, “education is something that can never be taken away.” Because of you both, I will forever be a lifelong learner.

To those who may be working on their own study, whether results are significant or not, that is still information you did not know before. There are days you will want to give up and move on. Do not give up. Keep going, stay curious and never stop learning.

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I would like to acknowledge my support system during this journey:

My family for supporting me through the journey unconditionally. Nancy, Gary, Brandi, Bruce, and to my niece, Karleigh, and nephew, Garrett, who joined me on this journey along the way. They reminded me of the importance of my work for all the future students who deserve a support system to succeed in their higher education endeavors and what the impact that a college degree can make on the future of those families.

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Chapter 1. Introduction

Outcomes based funding models for state institutions have increased awareness and pressures for colleges and universities to focus on benchmarks of success such as retention and completion. For example, institutions that are evaluated on performance outcomes are commonly graded on the percentage of first-time students who are retained fall-to-fall and who persist to graduation (Hearn, 2015). The national graduation rate has remained around fifty percent since the early 1900s meaning only half of the students who start college as freshmen graduate in six years (Swail, 2004). In 2017, Shapiro et al. indicated new student persistence to the second-year hovered around 60% nationally. Even though new student enrollment and access to higher education has increased, there has been little movement in retention and persistence in the past 100 years (Swail, 2004).

Those who fail to earn a degree will consequently earn twenty-three percent less than college graduates in the workforce (Tinto, 1993). Students who are the first to attend college and from low socio-economic families increase social and economic mobility by completing post-secondary education (Bowles & Gintis, 1976; Engle, 2007; Horn et al., 2004; Jencks & Riesman, 1968; Terenzini et al., 2001; Pascarella & Terenzini, 1991). Improving access to post-secondary education and opportunities continues to be a focus federally, as well as in most states.

Carroll (1989) discussed that the university path of persistence is created for students to incur the minimal cost of a degree on a four-year scale. Normally, if students stay on the path, pass all classes, and never deviate with other unnecessary courses, they can complete the degree at the lowest cost possible to the student at that institution. When low socio-economic students deviate from the path of persistence, they are twice as likely not to complete any post-secondary degree in comparison to higher socio-economic students (Carroll, 1989; Coogle & Knudson,

2020). Degree completion is also significantly related to annual earnings (Pascarella & Terenzini, 1991); for at-risk populations, such as low socio-economic and first-generation students, it can mean upward social and economic mobility through increased income and elevated overall status (Engle, 2007; Mortenson, 1999; Terenzini et al., 2001; SCORE, 2021).

Getting to college is only a part of the challenge. First-generation students have greater perceived challenges in college as well as lower graduation rates as compared to multi-generational peers (Choy, 2001; Unverforth et al., 2012; PNPI, 2018). First-generation students are less likely to develop relationships with other students, faculty, or staff than their non-first-generation or multi-generation counterparts even though they benefit the most from those relationships (Moschetti & Hudley, 2008). These students may be underprepared for college due to lack of exposure to people or mentors who have previously experienced the challenges and therefore perform academically lower than non-first-generation peers (Wiggins, 2011).

First-generation students experience different college outcomes than their non-first-generation peers including lower GPAs (Martinez et al., 2009) and higher dropout rates (Lofink & Paulsen, 2005; PNPI, 2018). First-generation students are more likely to report lower levels of social support (Terenzini et al., 1996), feeling less prepared for colleges, being less knowledgeable about college, and being more worried about failing compared to peers (Aspelmeier et al., 2012; Bui, 2002; Bettinger & Baker, 2014).

First-generation students are more likely to report coming from lower socioeconomic status backgrounds (Terenzini et al., 1996; PNPI, 2018). Low-socioeconomic students have more threats to retention, persistence, and completion of a post-secondary degree. First-generation students cite lack of family support, low self-esteem, challenges adjusting to college, racial disparities, and being academically underprepared (Falcon, 2015; Roksa & Kensley, 2018). Low-

socioeconomic students are less likely to have co-curricular experiences that facilitate connections with other students, and therefore are less likely to socially integrate into the community (Terenzini et al., 1996). According to the National Survey for Student Engagement (NSSE) (2008), first-generation and low socioeconomic students are less likely to engage in meaningful activities. The National Association for Student Affairs Professionals (NASPA) (2020) reported that first-generation students were more likely to use financial aid services but less likely to use health, academic advising, and academic support services. Weak connections to the institution and peers negatively affects retention, persistence, and completion (Astin, 1993; Kuh, 2009; Tinto, 1991). Tinto (1993) suggested that the cure to voluntary student attrition is both academic and social engagement that provides intentional connections to campus. Students who have frequent and rewarding interactions with members of the university community were more likely to stay (1993).

Universities began employing students in para-professional roles such as tutors, resident assistants, office workers, and mentors embedded in seminar courses, in the early 1950s when enrollment skyrocketed from institutionalizing the G.I. Bill and staffing was low. Utilizing peers in these roles became an effective device for improving retention and academic success of new students (Terrion & Leonard, 2007). Astin (1993) found that “the student’s peer group is the single most potent source of influence on growth and development during the undergraduate years” (p. 398). Subsequent researchers found peers were a stronger influence on new students than parents, teachers, or other experts (Mellanby et al., 2009) and peer collaboration in academic settings has a strong positive effect on educational outcomes such as academic achievement, student retention, and cognitive development (Latino & Unite, 2012).

Statement of the Problem

The national four-year degree completion rate of Pell-eligible students at four-year institutions is 14% compared to 20% of non-Pell-eligible students (Complete College America, 2020). In addition, only 20% of first-generation students complete a degree within six years compared to 49% of continuing-generation students (NASPA, 2020). The most financially vulnerable students were taking longer to complete a degree, accumulating more debt, while departing higher education without attaining a post-secondary credential. Universities were losing revenue when students depart without a degree and additionally penalized when too many students default on student loans. Research supports the influence of peers on student retention and completion, but there is a gap in research on the influence of near-peer coaches on student retention.

Purpose of the Study

The purpose of this non-experimental, quantitative study is to investigate the relationship between near-peer coaching and retention of first-time, full-time, Pell-eligible and first-generation college students at two public four-year institutions partnering with the non-profit organization, College Possible. This study seeks to guide practitioners to provide intentional programming for students in these at-risk populations. Literature and prior research suggest the importance of offering programs that support low-socioeconomic students and first-generation students in their academic goals. This research seeks to illustrate how near-peer coaching models can support low socioeconomic and first-generation students in continuing to their second-year becoming more likely to complete a post-secondary degree.

Research Questions

This study is guided by following research questions (RQs):

- RQ1: Is there a significant difference in the fall-to-spring retention rate of first-time full-time Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach?
- RQ2: Is there a significant difference in the fall-to-fall retention rate of first-time full-time Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach?
- RQ3: Is there a significant difference in the fall-to-spring retention rate of first-time full-time first-generation students with a near-peer coach and that of those who did not have a near-peer coach?
- RQ4: Is there a significant difference in the fall-to-fall retention rate of first-time full-time first-generation students with a near-peer coach and that of those who did not have a near-peer coach?
- RQ5: Is there a significant difference in the fall-to-spring retention rate of first-time full-time first-generation and Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach?
- RQ6: Is there a significant difference in the fall-to-fall retention rate of first-time full-time first-generation and Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach?
- RQ7: Is there a significant difference in the first-year cumulative grade point average between Pell-eligible students who were assigned a near-peer coach and Pell-eligible students who were not assigned a near-peer coach?

RQ8: Is there a significant difference in the first-year cumulative grade point average between first-generation students who were assigned a near-peer coach and first-generation students who were not assigned a near-peer coach?

RQ9: Is there a predictive relationship between fall-to-spring retention and near-peer coaching controlling for first-generation and Pell-eligible students?

RQ10: Is there a predictive relationship between fall-to-fall retention and near-peer coaching controlling for first-generation and Pell-eligible students?

Significance of the Study

This study will supplement existing research on first-generation, low-socioeconomic students, and near-peer coaching by combining research and current programming to understand the retention of low socio-economic and first-generation students. For these populations, completing a degree can alter the financial and social trajectory of their entire family. By starting with retention to the second-year, practitioners can continue the research as a longitudinal study on how coaching affects completion and degree attainment for Pell-eligible and first-generation students. Additionally, practitioners will be able to use the information from this study to adjust student support services for first-generation and Pell-eligible students to better support this population in achieving academic goals. Universities benefit financially as well as in status when students matriculate through their programs and graduating in a timely manner.

Delimitations

Although the institutions that partner with College Possible vary in type and nature, this study was conducted at two similar four-year institutions in different states. It was expected that

the institutions were facilitating the program to the College Possible expectations and training guidelines to ensure the two programs were similarly conducted. Additionally, it was expected that institutions were tracking and collecting the data on the first-time full-time 2019-2020 cohort with procedures that ensure integrity of clean data. Lastly, first-generation and Pell-eligible students who were attending college part-time, or under 12 credit hours, were not included in the study and were not assigned near-peer coaches.

Limitations

Due to the narrow focus of the study, limitations were present. The study was conducted at two institutions in two different regions of the country; therefore, the results may not be generalized to the larger population. While the two institutions were comparable in size, demographics, and institutional mission, the results cannot be assumed to be standard in other types of institutions such as private universities or community colleges.

A second limitation of the study was that data collected was from the 2019-2020 freshman cohort, which was the first-year of comprehensive data for the programs at participating institutions. During spring 2020, universities were affected by the COVID-19 outbreak that created a global pandemic. In week eight of the semester, both participating universities switched to offering only online course instruction. Coaches and university faculty and staff transitioned to telecommuting and used virtual meeting software to connect with students. Therefore, students were not on campus and encountered many unique challenges compared to other cohorts. Coaches experienced new challenges and were not previously trained on supporting their students during the effects of the pandemic. The effects of COVID-19 negatively affected universities and all demographics of students, especially the at-risk

population. However, programs and interventions were created that were never before part of university practice. These interventions included programs such as calling campaigns to all enrolled students by faculty, staff, and administrators to provide any assistance needed during the pandemic, CARES funding allowed institutions to award grants to students for emergency financial assistance, universities loaned laptops and Wi-Fi cards to any student without technology access. It is hard to say if these never before used interventions affected the results of this study.

Definitions of Terms

For the purpose of this study, the following definitions were provided to enhance understanding of the terms used within the context of this study.

- *4-year institution.* Institution granting bachelor's degrees that are expected to take four years, or eight semesters, to complete. These institutions can offer other diverse degree options from associates, certificates, and higher level of degrees but primarily are bachelor's degree granting institutions (The Carnegie Classification of Institutions of Higher Education, 2020).
- *College Possible.* A non-profit partner organization that manages the university relationship with AmeriCorps and provides extensive and continual training for success coaches across all partnering institutions.
- *COVID-19.* Refers to the global flu type pandemic which hit the United States in March 2020 and disrupted business as usual requiring extreme alterations to daily life. It is an ongoing pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

- *First-generation college students.* Individuals pursuing a higher education degree whose parents or guardians have not attained a post-secondary degree (Peralta & Klonowski, 2017).
- *First-time, full-time students (FTFT).* Students who have never attended a college or university and who have no prior credit from a college or university, excluding credits earned in high school through dual enrollment, advanced placement, and ACT scores (IPEDS, 2020). These students are enrolled for at least 12 credits, or full-time status, in their first semester at the post-secondary institution.
- *Near-peer coach.* Recent graduates who serve in an AmeriCorps service position at a College Possible partnering institution. Coaches are recent alumni working with first-year students in transition, specifically first-generation and Pell-eligible students.
- *Pell Grant.* Largest federally funded need-based aid program in the United States providing grants to low-income undergraduate students (U.S. Department of Education, 2015).
- *Pell-eligible.* Students eligible for the Pell grant due to low-socioeconomic status. Not all students who are eligible for the Pell grant receive the grant. This indicator allows universities to identify the socioeconomic status of students
- *Retention rate.* The percentage of students who return a subsequent semester or indicated term. The most commonly measured retention rate for new students starting in the fall semester and returning the next fall semester.

Overview of Study

This study examined the relationship of near-peer coaching on retention of Pell-eligible and first-generation students. This dissertation provides research relevant to the field of higher education and will inform other researchers and institutions on supporting students in these at-risk categories. This chapter provides an introduction to the study. Chapter 2 provides the reader with an overview of relevant literature including the theoretical framework guiding the study. Chapter 3 provides a detailed explanation of the methods for future researchers to recreate the study. Chapter 4 provides the research findings and results. Chapter 5 offers a summary of the results, conclusions, discussion of results from the researcher, and provides suggestions for future research.

Chapter 2. Review of Literature

College graduates were more likely to be employed, earn more money over a lifetime, engage in healthy behaviors, be active citizens, and provide better opportunities for their children than those who have not earned a college degree (Ma et al., 2019), however the cost of college related expenses limits the accessibility of higher education for first-generation students and students from low socio-economic backgrounds (Swail, 2004). First-generation students generally have weaker academic preparation, lower grade point averages, and were less likely to engage in the university community (Pascarella et al., 2004; Pratt & Skaggs, 1989; Falcon, 2015; Roksa & Kinsley, 2018), and were more likely to drop out and not graduate (Warburton et al., 2001). The completion rates of low-socioeconomic students, defined by Pell grant eligibility, is only 40% in six years at bachelor's degree granting institutions (Complete College America, 2020). The risk of not completing a degree can be exponential for these at-risk student populations. Students who do not complete a degree were often left with debt and little chance of obtaining a job that can support the debt payments (Ma et al., 2019).

Completing a college degree begins with enrollment. While there has been an increase in access to higher education, there has been little movement in persistence and degree completion (Swail, 2004). Tennessee led the nation in policies and initiatives in creating educational access and incentivizing institutions to focus on student completion with the outcomes based funding formula (SCORE, 2021). However, according to the data presented by SCORE (2021) Tennessee continues to lag the rest of the country in postsecondary attainment across all groups. As a nation, the United States still lags behind other countries in educational attainment (OECD, 2007).

Low-income, first-generation students, and their families face challenges in understanding the admissions process and how to obtain financial aid (Bos et al., 2012). Additionally, students who attempt to work through the process must then overcome the challenges of integrating and transitioning to college life and expectations in the first-year. Tinto (1993) suggested most students leave higher education in the first-year due to the unique challenges faced during the transition to college; 25 years later, that remains relatively unchanged (Complete College America, 2020).

Colleges that offer support services to guide students through the complex processes of the university find higher levels of retention and completion for at-risk students (Swail, 2004). Additionally, engaging in student support services and other academic activities support higher persistence and degree completion rates (Astin, 1993; Chickering & Gamson, 1987; Swail, 2004). Specifically, for first-generation students, engaging in academic activities has a significantly positive effect on developing critical thinking and internal motivation for academic success (Astin, 1993; Pascarella et al., 2004; Tinto, 1993). First-generation students who engage in extra-curricular peer involvement such as student activities, leadership, and student organizations, are exposed to others with healthier academic understanding and behaviors, which help them become more successful academically (Astin, 1993; Pascarella et al., 2004). Additionally, Bos et al. (2012) found students who were offered advice and guidance by peers were significantly more likely to follow the advice than if given the same advice from authority figures.

Theoretical Framework

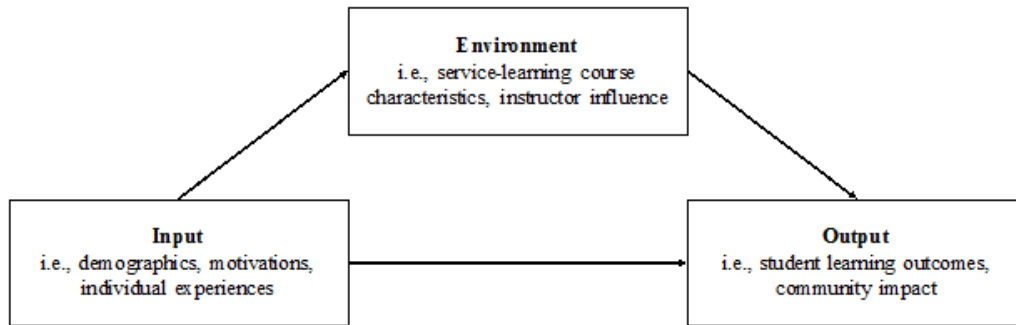
Bayer (1968), and Summerskill (1962) suggested that student attrition was a reflection of the student's academic inability and that failure to be successful in college was the student's responsibility and not the institution's. In 1975, two influential works were published, Tinto's (1975) institutional departure model and Astin's 1975 *Preventing Students from Dropping Out*. Tinto's (1975) theory incorporated student commitment to an institution, aspirations for degree, and integration into the academic and social life of campus. Tinto's theory was refined in 1993 to include a longitudinal, explanatory model of departure adding in adjustment and external obligations or commitments. In 1975, Astin studied both student and institutional characteristics to determine how variables affected student retention leading to publishing his student involvement model. Astin's and Tinto's work included sociological characteristics affecting retention which was a deviation from earlier research on student retention that focused only on student characteristics.

Astin's Theory of Student Involvement

In 1975, Astin presented a theory of student involvement that focused on the quality and amount of time students spend engaging with the university in different ways and the impact on student persistence in college. In 1977, he began a 20-year longitudinal and multi-institutional study of college dropouts. Astin's (1993) theory focused on the importance of students' investment of physical and psychological energy in different academic and social activities. Astin (1993) proposed the input-environment-outcome (I-E-O) model (Figure 1) that provides a guide to institutional effects on environmental influences.

Figure 1

I-E-O Model



Astin's (1993) I-E-O model provides practitioners a framework that applies university programming and policy in which to influence the environment in order to affect student retention. Outcomes were based on three elements: Input, environment, and output. Input includes everything the student brings with them to the institution such as background experiences, motivations, and expectations. Environment includes the institution's people, programs, and opportunities for students to engage whether on campus or off campus. Output includes student characteristics, values, beliefs, skills, and behaviors as they exist after college. Practitioners and researchers can use the I-E-O model to explain the effects of environmental influences on student growth and how colleges have control over the influences with programs and policies.

Astin (1985) included institutional responsibilities as well as student responsibilities to create outputs. Inputs such as student involvement relies on the student's motivation to become involved. Astin (1985) suggested five basic postulates for student involvement:

- (1) involvement requires the investment of psychological and physical energy in objects of one sort or another, whether specific or general;
- (2) involvement is a continuous

concept: different students will invest varying amounts of energy in different objects; (3) involvement has both quantitative and qualitative features; (4) the amount of learning or development is directly proportional to the quality and quantity of involvement; and (5) educational effectiveness of any policy or practice is related to its capacity to induce student involvement. (pp. 135-136)

Astin (1985) balanced the psychological and sociological explanations of student change by assigning critical roles to both the institution and the student. Astin argued that it is the responsibility of the institutions to offer quality opportunities for student involvement and it is the responsibility of the student to lead the experience and actively exploit the opportunities offered by the institution.

In *Four Critical Years: Effects of College on Beliefs, Attitudes, and Knowledge*, Astin (1993) endeavored to interpret factors in the college environment that significantly affect student persistence in college. Astin (1993) found that students who join social organizations or participate in extracurricular activities of any type were less likely to drop out. Astin (1999) explained that the frequency of interaction with peers, as well as other factors such as staff and faculty interaction, contributes to student retention. Astin's (1985, 1991, 1993, 1999) larger body of work affirmed practitioners' beliefs that student involvement on campus and with peers lead to retention.

Tinto's Theory of Student Departure

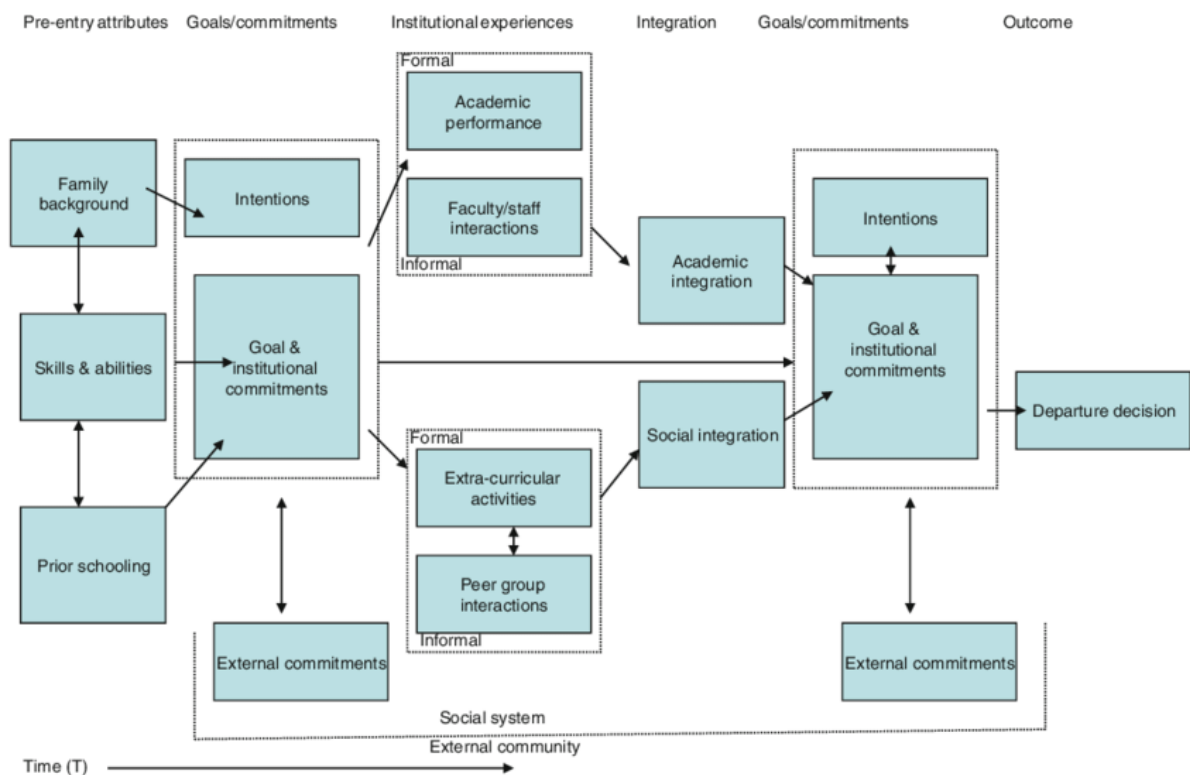
Tinto (1975) was one of the first researchers to lay out a model that made connections between the environment and student retention over time. Earlier retention theories such as Sumerskill (1962) and Marks (1967) focused on purely psychological models of education

persistence highlighting the importance of intellectual attributes to meet academic demands (Tinto, 1993). Other theorists such as Heilbrun (1965), Rose and Elton (1966), Rossmann and Kirk (1970) and Waterman and Waterman (1972) focused on the roles that personality, motivation, and disposition have on students meeting academic demands.

In 1975, Tinto suggested a Student Attrition Model (SAM) that focused on “good fit” between the student’s intent and the institution as a key factor in student persistence. After much scrutiny and testing of his original model in 1975, Tinto revised his attrition model to a Student Integration Model (SIM) that included importance of integration into the social culture of the institution. In 1993, Tinto presented the finalized model (Figure 2).

Figure 2

A Longitudinal Model of Institutional Departure



This model illustrates student departure from institutions as a longitudinal process based on interactions between students with given attributes, skills, financial resources, prior educational experiences, and dispositions including intentions and commitments, and other members of the academic and social systems of the institution. Tinto suggested that students who integrate into the campus community increase their commitment to the institution and are more likely to persist to graduation.

Tinto (1993) hypothesized that students enter college with individual backgrounds and experiences including expectations and personal goals. These commitments and intentions continually evolved through a longitudinal series of interactions with members of the academic and social systems of the institution. Students enter the university with differing family and community backgrounds including skills, financial resources, and varying types of pre-college educational experiences, all of which directly affect the student's educational goals and commitments.

Tinto (1993) also found that students were departing not having connected to the intellectual and social life of the institution and therefore never accomplishing integration. However, students who successfully integrate into the community share normative values of that community and therefore abide by the formal and informal values for membership in that community (Tinto, 1993). Integration strengthens the student's commitment to both personal goals and the institution, and therefore, the students are more likely to be retained and persist.

Retention Trends in Higher Education

Retention in higher education has gained political focus at both state, national, and international levels. Between 1970 and 1999, access to college increased 31%, however, degree

attainment only increased 4%. For the same group in 1999, completion rates fell by more than 25% (Turner, 2004). Over the last three decades completion rates have increased two to three percentage points in the United States, while other countries have seen 10 to 15 percentage point increases in degree attainment (OECD, 2007). Results such as these have led policy makers to increase their focus on improving persistence and graduation rates, and holding institutions accountable (Bettinger & Baker, 2014).

According to the Complete College America Data Dashboard (2020), the national completion rate for students at four-year bachelor degree granting institutions is 44% in six years. The first year is significant to a student's transition to college and probability of completion (Tinto, 2006). Coogle and Knudson (2020) found the largest percentage of student departure occurs in the first year and prior to the beginning of the second year. The National Center for Education Statistics (2019) reported the fall-to-fall retention rate for first-time, full-time undergraduate students was 81% for the 2016-2017 cohort with higher retention and completion rates at highly selective institutions and lower rates at institutions with a mission of access.

Berkner et al. (2002) summarized the 1995 cohort data from the *Beginning Postsecondary Students Survey* and found that 24% of four-year students leave their initial institution in the first two years with 14% in the first year and 13% in the second year. Engle and Tinto (2008) found that 60% percent of first-generation college students leave higher education without obtaining any kind of post-secondary credential. Additionally, low-income students leave their first institution at higher rates than their more affluent counterparts. Interpreting findings from the same data, Swail (2004) reported that a quarter of all students complete their degree at a different institution from that which they started, that 46% of first-time students who

left their initial institution in their first-year never engage in post-secondary education again, and that 50% of four-year students who did not delay entry to post-secondary education completed a degree at their first institution. Only 8% of the students who completed a bachelor's degree within six years earned it at an institution other than their initial institution.

More recently, Coogle and Knudson (2020) found that continuous enrollment is the strongest predictor of graduating in six years or less. College Possible followed a cohort of first-generation and low-socioeconomic students from high school through college from 2003 to 2013. They found that 47% of students maintained continuous enrollment, and 93% of those graduated within six years. Of the 53% who stopped out, only 10% graduated within six years. Coogle and Knudson's findings are consistent with those of Berkner et al. (2002) and Swail (2004), who both used the 1995 cohort data from the Beginning Postsecondary Students Survey.

Retention is not only a university issue. Decades of research indicate a significant impact of higher education on individuals and society including improved health outcomes and stronger community vitality. Carnevale et al. (2018) found that high school diplomas are only sufficient for three out of ten jobs today, while 60% of all jobs requires some postsecondary education beyond high school, and 80% of jobs that support middle-class lifestyle. Therefore, delay in degree attainment or lack of degree attainment lowers the supply of skilled workers to the economy (Turner, 2004). Reduced growth of college-educated workers affects long-term progress in productivity and increases the degree of inequality of earning. As for the student, attaining a degree significantly increases salary and job security (U.S. Bureau of Labor Statistics, 2019).

State policymakers are creating funding formulas for higher education that require institutions to focus on retention and degree completion. Tennessee was one of the first states to

move to Outcomes Based Funding that incentivized institutions to create interventions that affect student retention and matriculate students to specific benchmarks that indicate progress towards graduation (Ortagus et al., 2020). Now, 41 states have adopted outcomes based formulas funding systems for higher education. However, Ortagus et al. (2020) also highlighted the unintended consequences of implementing performance-based funding which included focusing on the quick fix and cheapest interventions to increase numbers temporarily, restricting admission to underrepresented students who are less likely to persist and graduate, therefore decreasing access (Kelchen & Stedrak, 2016), and limiting the value of part-time students (Burke, 1998). Burke (2001) suggested that successful performance based funding programs rely on inputs of critical stakeholders, details of the program design, emphasis on policy values, and timing of program implementation.

First-Generation Students

First-generation students, students whose parents have not attended or earned a college degree, are unique from their non-first-generation peers and are less likely to attend and attain a post-secondary degree (Engle, 2007). First-generation students are more likely to be from families whose median income is \$41,000 compared to \$90,000 for the continuing-generation student's family income (NASPA, 2020). Chen (2005), using research from NELS Postsecondary Education Transcript Study, found that 43% of first-generation students who attended any postsecondary institution left without earning a degree compared to 20% of multigenerational students who left without earning a degree. In 2020, NASPA reported only 20% of first-generation students attained a degree within six years of enrollment.

In one of the earliest studies conducted on first-generation students, Billson and Terry (1989) comparing academic expectations between first-generation and multi-generation students, found a gap in resources and social integration. Not only were first-generation students more likely to live off campus and work 35 plus hours beyond school, they also had less study time due to the work schedule, and lower rates of social and structural integration. Therefore, first-generation students are considered at-risk with regards to access and continuation of higher education (Auclair et al., 2008). In 2020, NASPA reported a higher percentage of first-generation students use financial aid services, but a lower percentage of first-generation students use other resources such as health, academic advising, and academic support services. Deil-Amen and Rosenbaum (2003) found that first-generation students often do not realize they need help, do not take initiative to seek help, and do not know the questions to ask. They also noted that structured advising is most advantageous to students in this demographic.

First-generation students experience barriers to navigating college challenges including finances, parental resentment, academic under preparedness, and unrealistic expectations about college life (Auclair et al., 2008; Horn & Nunez, 2000; Ward et al., 2012). Due to these barriers, by 12th grade only 50% of first-generation students expect to earn a bachelor's degree compared to 90% of their continuing generation counterparts (Berkner & Chavez, 1997). First-generation students are more likely to be disadvantaged in terms of support, encouragement, and guidance related to college enrollment due to parental lack of experience in the transition into higher education (Auclair et al., 2008; Ward et al., 2012). Family has a strong influence on first-generation students as they transition to college, as students are constantly balancing their connections to the family and the university life (Covarrubias et al., 2018). Family responsibilities often take priority over academic responsibilities (Covarrubias et al., 2018).

Pell-Eligible Students

Pell-eligible students share some characteristics with first-generation students, creating even more challenges for students who fall into both categories. For low-socioeconomic students, the risk of enrolling in higher education is immense. Not only do low-income students have to provide the money for tuition and expenses but they must also forego wages while they are in school (Baum, 2015). The Federal Pell grant program was instrumental in expanding higher education access to these students. The grant redirected money from the universities to the students, allowing students to have the choice in higher education institutions (Baum, 2015). When the Pell grant began in 1972, only 12% of Americans over the age of 25 who had completed high school had completed four years of college. By 2014, that number increased to 32%. The award amount varies for qualified students and the students can choose not to receive the grants (Baum, 2015). Of the students who entered college in 2003-2004, 47% received a Pell grant for at least one year, however, only half of the students had earned a post-secondary credential by 2008 (National Center for Education Statistics, 2009). Access to higher education for low-income students has increased and gaps in access between high- and low- income students decreased, however the gap between affluent and low-income student's four-year degree completion remains (Tinto, 2006).

Income matters in student retention. Students departing from even the most elite institutions are more likely to be low-income students (Carnevale & Rose, 2003). Carnevale and Rose found that at top tier institutions, with presumably the most talented and motivated students and well-staffed student support services, low socio-economic students had a 76% graduation rate compared to the affluent students who had a 90% graduation rate.

COVID-19 and Retention

The COVID-19 pandemic has created spikes in unemployment rates indicating low-income families were disproportionately impacted and experience more loss and challenges than others (Berube & Bateman, 2020; Carnavale & Fasules, 2021). As universities ended business as usual and moved to primarily online instruction and online operations, they quickly realized many students only used cellular phones and did not have access to traditional computers (Carnavale & Fasules, 2021; Neuwirth et al., 2020). Even with technology, secure students did not have the ability to maintain their normal class days with new demands of family or changes in employment (Neuwirth et al., 2020). Students reported challenges juggling at-home family care, home schooling their children, abrupt changes in work schedules, uncertainty in employment, loss of employment for either themselves or family members, while managing normal home responsibilities. First-generation and low-socioeconomic students, who are already at a disadvantage in a pre-pandemic world, are facing even more challenges during the pandemic.

In March 2020, the first month of the pandemic, approximately 10 million workers filed for unemployment benefits (Berube & Bateman, 2020). Congress responded to the challenges of all Americans in the pandemic by passing legislation that supported those most affected financially, such as the \$2.2 trillion Coronavirus Aid, Relief, and Economic Security (CARES) Act. Other grants became available to universities and students to increase technology accessibility and financial support (2020).

In early COVID-19 retention research, Davis (2020) found that first-generation students reported difficulties with persistence, relationships, employment, health, and finding resources, Students reported feeling unable to finance future semesters and likely to depart from higher

education in search of work and financial stability. In another early COVID-19 study, Soria et al. (2020) found that first-generation students were more likely to experience financial hardships such as lost wages from family members, lost wages in their own employment opportunities, and increased living and technology expenses. Additionally, universities switched to online instruction where first-generation students reported challenges adapting to the new instructional method.

Fall 2020 enrollment reports from the National Clearinghouse (2020) indicate undergraduate enrollment decreased by 4%, with first year enrollment down 13% spring to fall, which is a 21% decrease than pre-pandemic years. Carnavale and Fasules (2021) reported that 75% of individuals changed their plans to attend in fall 2020 while more than one-third of individuals with postsecondary plans reported canceling plans entirely. The research also indicated individuals from low socio-economic households were more likely to change fall plans than those from higher-income households. However, the Southern Utah University is reporting higher enrollment and attributing that success during the pandemic to their peer mentoring program (Patel, 2020). Research on the impacts of COVID-19 will continue as the pandemic persists and the world slowly finds a new normal.

Peer Relationships and Mentorship

Peer relationships are essential to the undergraduate experience (Felton et al., 2016). Influence from peers has both psychological and sociological dimensions (Astin, 1993). Peer influences fit the theoretical frameworks that are focused in both psychological and sociological approaches to student retention. Astin (1993) stated, “The student’s peer group is the single most potent source of influence on growth and development during the undergraduate years” (p. 398).

Students seek identification and affiliation with others who share their beliefs and who are like them in certain important ways (Astin, 1993). The “more frequent formal and informal interaction between students and other members of the institution, the more likely the students will stay. Connections among students cement personal affiliations which tie the new student to the fabric of student culture” (Tinto, 1993, p.164-165). Hudley et al. (2009) reported similar findings suggesting that students who surround themselves with peers who have the same educational aspirations receive support and opportunities to develop.

This supports the concept of near-peer education, a widely accepted model where students learn from higher-level students or recent graduates (Newton & Ender, 2010). Wagoner (1982) traced peer teaching all the way back to Aristotle and his use of *archons* or student leaders. There were traces of using near-peers to tutor lower level students in the one-room schools of rural America (Lippitt & Lippitt, 1968) where the use of near-peer teachers was often out of necessity, however, practitioners quickly realized the positive impact on both student and peer educator (Lippitt & Lippitt, 1968). Universities began using students in paraprofessional roles in the early 1950s when enrollment skyrocketed and staffing was low (Terrion & Leonard, 2007). Formal programs of students teaching students first appeared in 1960 (Goldschmid & Goldschmid, 1976) when students became dissatisfied with faculty teaching pedagogies in large lecture courses where the students were expected to assume passive learning roles (Whitman & Fife, 1988).

Now, new students interact with peers in mentoring roles such as tutors, resident assistants, office workers, and mentors embedded in seminar courses (Newton & Ender, 2010; Terrion & Leonard, 2007). Connecting with peers and building relationships in formal and informal settings is important to student integration into the community (Tinto, 2006). Mentors

help students prepare academically, counsel students on better study skills, or help them identify university resources (Bettinger & Baker, 2014). Peer educating can be a useful method for creating connections and therefore improving retention and academic success (Terrion & Leonard, 2007; Tinto, 2006).

The influences of peers on student persistence have surpassed the influence of faculty members (Bank et al., 1990). Students are more willing to share concerns with other peers than with a faculty member who can be more intimidating to new students (Cuseo, 2010; Pascarella & Terenzini, 2005). Peers can also better identify and understand the new student's challenges (Lockspeiser et al., 2008) and communicate with students outside of the classroom (Griffin & Romm, 2008) through platforms familiar to the students such as texting and social media (Cuseo, 2010). Peers have a unique opportunity to motivate students academically as well to encourage their involvement in co-curricular experiences (Astin, 1993; Kuh 1996; Pascarella & Terenzini, 1991). Students are more likely to reach out to their peers because they share similar experiences and the peer can still identify with and understand the student's situation (Lockspeiser et al., 2008). Student development theorists agree that peer groups have a strong influence on an individual's growth, meaning making, and interpersonal, cognitive, and identity development (Chickering & Reisser, 1993; Magolda, 1992; Pascarella & Terenzini, 2005).

Astin (1993) found that retention increased 13.2% for students with peer interaction compared to students who had the least interaction with peers. Astin (1985, 1997) also found that students who interacted most frequently with peers had a significantly higher retention rate than students who had less interaction with peers. Peers who are able to connect early and often with new students are able to facilitate personal connections that tie the new students into the campus

culture (Tinto, 1993). These peer influences are impossible to re-create through faculty or staff interaction (Newton & Ender, 2010).

Collins et al. (2014) studied wellbeing, integration, and retention, comparing students who had peer mentors with those who did not and found that non-peer mentored students were four times more likely to want to leave the institution than students with peer mentors. They also indicated peer mentoring had a significant effect on mediating transitional stress, self-esteem, and perceived social support (Collins et al., 2014). Additionally, students with peer mentors had significantly better grades (Rodger & Trembly, 2003) lower failure rates, and better retention (Chester et al., 2006; Goff, 2011; Hu & Ma, 2010; Leidenfrost et al., 2011; Ward et al., 2010). Lastly, Yomtov et al. (2015) found mentored students felt significantly more connected to the university and like an active part of the university than students without mentors. This supported Bettinger and Baker's (2014) findings that coached students were more likely to persist for up to two years with a 15% increase in retention among the sample. The same students were 4 % more likely to graduate after four years. All results of the studies presented are consistent with Tinto's theory of departure and Astin's theory of involvement.

Chapter Summary

The theoretical frameworks of Astin (1985) and Tinto (1993) created a foundation for understanding the positive impact of peer interaction on retention. The literature provides the scope of how peer interactions and retention effects building strong peer relationships early as well as the need to support first-generation and Pell-eligible students in their first year. Chapter 3 provides the research methodology.

Chapter 3. Methodology

The purpose of this non-experimental, quantitative study was to investigate the relationship between near-peer coaching and retention of first-time, full-time, Pell-eligible and first-generation college students at two public four-year institutions partnering with the non-profit organization, College Possible. This chapter includes the methodology used to answer the research questions presented.

Research Questions and Null Hypotheses

This study is guided by following research questions:

RQ1: Is there a significant difference in the fall-to-spring retention rate of first-time full-time Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach?

H₀₁: There is not a significant difference in the fall-to-spring retention rate of first-time full-time Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach.

RQ2: Is there a significant difference in the fall-to-fall retention rate of first-time full-time Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach?

H₀₂: There is not a significant difference in the fall-to-fall retention rate of first-time full-time Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach.

RQ3: Is there a significant difference in the fall-to-spring retention rate of first-time full-time first-generation students with a near-peer coach and that of those who did not have a near-peer coach?

H₀3: There is not a significant difference in the fall-to-spring retention rate of first-time full-time first-generation students with a near-peer coach and that of those who did not have a near-peer coach.

RQ4: Is there a significant difference in the fall-to-fall retention rate of first-time full-time first-generation students with a near-peer coach and that of those who did not have a near-peer coach?

H₀4: There is not a significant difference in the fall-to-fall retention rate of first-time full-time first-generation students with a near-peer coach and that of those who did not have a near-peer coach.

RQ5: Is there a significant difference in the fall-to-spring retention rate of first-time full-time first-generation and Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach?

H₀5: There is not a significant difference in the fall-to-spring retention rate of first-time full-time first-generation and Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach.

RQ6: Is there a significant difference in the fall-to-fall retention rate of first-time full-time first-generation and Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach?

H₀6: There is not a significant difference in the fall-to-fall retention rate of first-time full-time first-generation and Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach.

RQ7: Is there a significant difference in the first-year cumulative grade point average between Pell-eligible students who were assigned a near-peer coach and Pell-eligible students who were not assigned a near-peer coach?

H₀7: There is not a significant difference in the first-year cumulative grade point average between Pell-eligible students who were assigned a near-peer coach and Pell-eligible students who were not assigned a near-peer coach.

RQ8: Is there a significant difference in the first-year cumulative grade point average between First-generation students who were assigned a near-peer coach and First-generation students who were not assigned a near-peer coach?

H₀8: There is not a significant difference in the first-year cumulative grade point average between First-generation students who were assigned a near-peer coach and First-generation students who were not assigned a near-peer coach.

RQ9: Is there a predictive relationship between fall-to-spring retention and near-peer coaching controlling for first-generation and Pell-eligible students?

H₀9: There is not a predictive relationship between fall-to-spring retention and near-peer coaching controlling for first-generation and Pell-eligible students.

RQ10: Is there a predictive relationship between fall-to-fall retention and near-peer coaching controlling for first-generation and Pell-eligible students?

H₀10: There is not a predictive relationship between fall-to-fall retention and near-peer coaching controlling for first-generation and Pell-eligible students.

Population/Sample

The data collected for this study is from two four-year institutions partnered with the College Possible Catalyze program, an AmeriCorps organization. The institutions were chosen based on their partnership with College Possible and similarities in how the near-peer coaches are being utilized at each institution. While the institutions differ in enrollment and type, the students being supported and how they are coached were similar. Both institutions had near-peer coaches serving first-year, Pell-eligible, and first-generation college students. The near-peer coaches were trained by College Possible to ensure consistent practices on creating connections and supporting their students.

The population of this study included all first-time, full-time, Pell-eligible and first-generation college students at the two institutions partnering with the College Possible Catalyze program in the fall 2019 cohort. First-time full-time students included were those who had not attended another postsecondary institution before enrolling in their university and were registered for at least 12 credit hours in their first semester. Students in this population were randomly assigned a near-peer coach by the institution.

There were 2849 students in the complete first-time full-time cohort that began college in fall 2019. The students were randomly assigned to a near-peer coach. Coaches supported a student portfolio of 120 new students. A total of 499 Pell-eligible students and 411 first-generation students were assigned a near-peer coach. As a comparison group, 752 Pell-eligible students and 300 first-generation students did not receive a near-peer coach. Additionally, there were students who did not indicate their first-generation status. These students were coded as first-generation status unknown. There were 53 first-generation status unknown with a coach and 220 without a coach. Even though all students who were assigned a coach, they were not

required to respond to their coach's outreach. However, each student with a coach received at least five attempted contacts in multiple communication methods each semester.

Data Source

This study included only archival data and, therefore, informed consent was not required. I followed guidelines and processes of the IRB to protect any data collected. I collected archival data from two institutions partnering with the non-profit organization, College Possible. Each institution tracked retention data of all students including those involved in the College Possible program. This data for the first-time, full-time cohort from fall 2019 and included if the student was assigned a near-peer coach, their Pell-eligible and first-generation status, whether they were retained to spring, or to the next fall, and their cumulative GPA.

Data Collection

I submitted a request for data to be returned in aggregate form in an Excel spreadsheet to the universities' Institutional Research offices. Each institution compiled the following information on the fall 2019 first time, full time cohort: assigned near-peer coach (Yes or No), GPA, retention to spring (Yes or No), retention to fall (Yes or No), Pell-eligible (Yes or No), and first-generation (Yes or No). No identifying information was requested, the institutions removed any identifying information before sending any data.

Data Analysis

I entered the collected data into the SAS statistical software for analysis. I coded students as follows: Pell-eligible with a near-peer coach, Pell-eligible without a near-peer coach, first-

generation with a near-peer coach, and first-generation without a near-peer coach. For Research Questions 1-6, I conducted a series of chi-square tests to test the correlation of near-peer coaching and retention. Chi-square tests focus on nominal data and observed frequencies (Witte & Witte, 2010). For Research Questions 7 and 8, I used a series of independent *t*-tests to compare GPA between first-generation students with and without a coach. For Research Question 9 and 10, I used a series of logistical regressions to determine if the data were predictive. Logistic regressions are used for categorical variables and therefore to test predictors of retention controlling for near-peer coaching, Pell-eligibility, and first-generation statuses at the 95% confidence level. I analyzed all data at the .05 level of significance.

Chapter Summary

This chapter included the methodology for this study including the population, intervention, and analyses used to test the null hypotheses. Chapter 4 includes the research findings and results for each research question.

Chapter 4. Findings

The purpose of this non-experimental, quantitative study is to investigate the relationship between near-peer coaching and retention of first-time, full-time, Pell-eligible and first-generation college students at two public four-year institutions partnering with the non-profit organization, College Possible. The hypotheses being tested was the significant association between near-peer coaching and students who are Pell-eligible or first-generation. The tests compared students with a coach and students without a coach in each student category Pell-eligible and first-generation or if they were in both. The sample included the 2019 first-time, full-time cohort at two four-year institutions partnered with the College Possible Catalyze program.

In all, data on 2849 students from two institutions were included in the study as illustrated in Figure 3. Of those students, 685 received a College Possible near-peer coach, 1250 were Pell-eligible, 712 were first-generation, 141 did not indicate their first-generation status, and 436 were both Pell-eligible and first-generation as illustrated in Figure 4.

Figure 3.

Student Distribution by Institution Affiliation

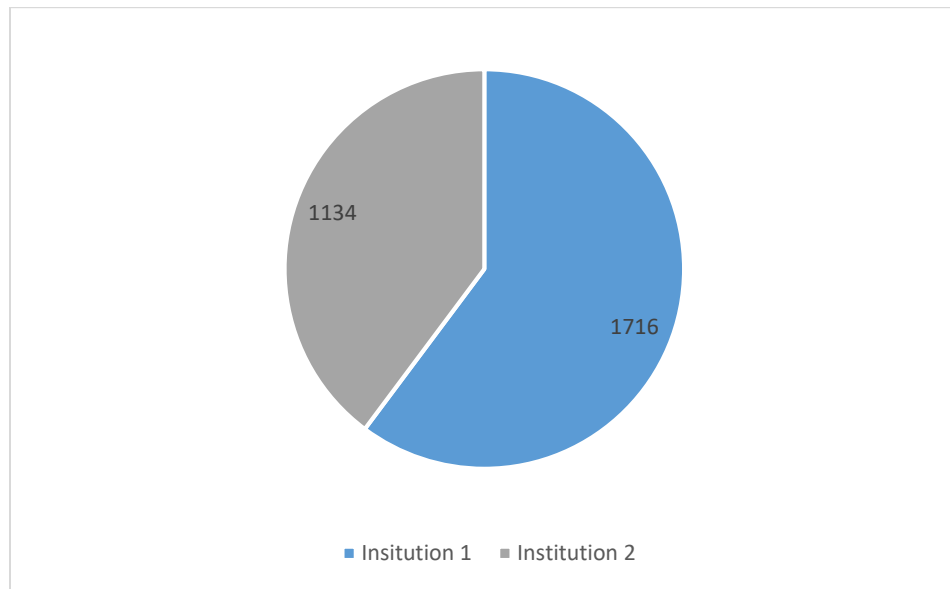
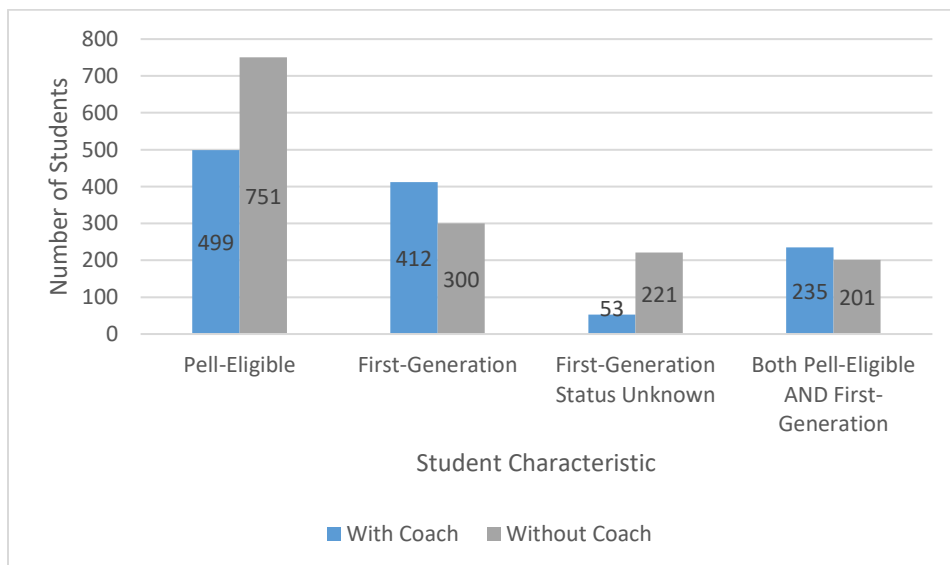


Figure 4.

Frequencies by Student Characteristic



Institution 1 had fewer students in the first-generation and Pell-eligible categories. Figure 5 illustrates the student demographics by institution. Some students fall into multiple categories and therefore do not add up to the whole of the population. At Institution 1, 260 students had a near-peer coach while 875 students did not. At Institution 2, 426 students had a near-peer coach while 1290 students did not, as illustrated in Figure 6. Figure 7 and Figure 8 show the breakdown of students coached in each category at each institution.

Figure 5.

Student Characteristics by Institution

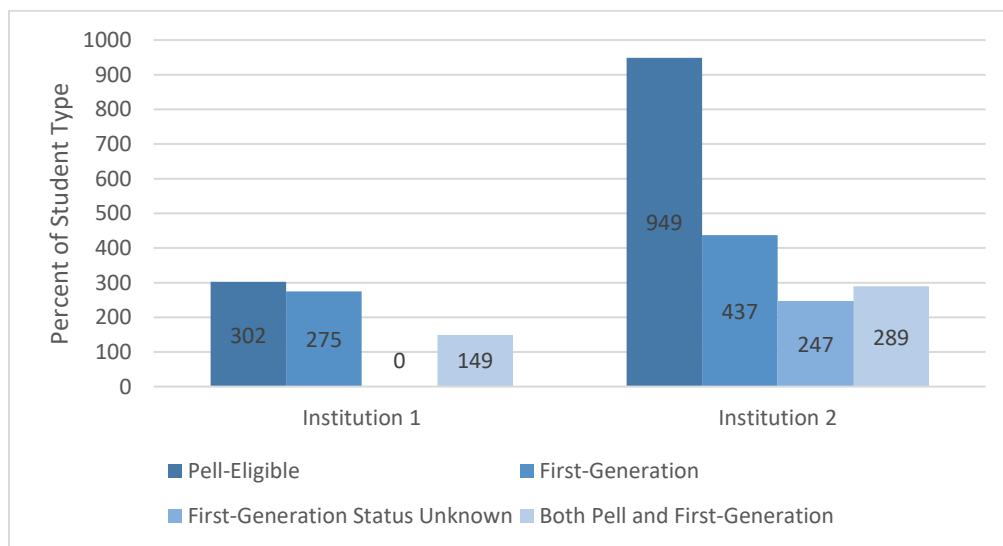


Figure 6.

Assigned a Coach vs Not Assigned a Coach at each Institution

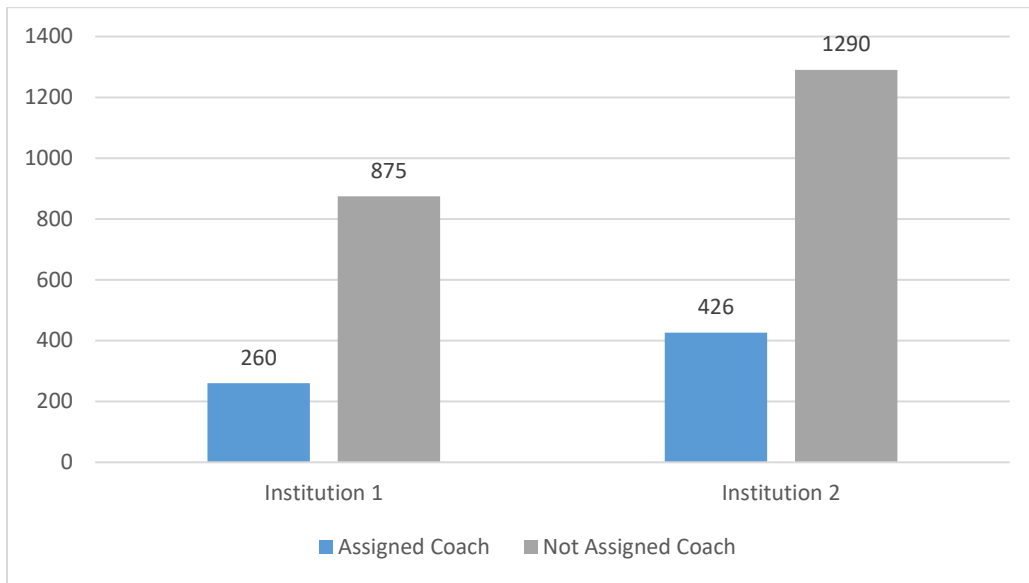


Figure 7.

Characteristics of Students With/Without a Coach at Institution 1

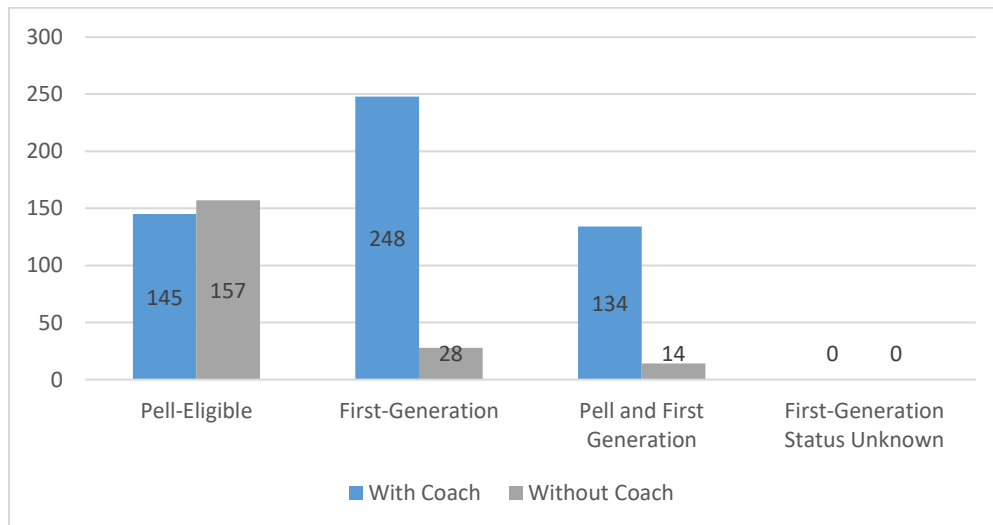
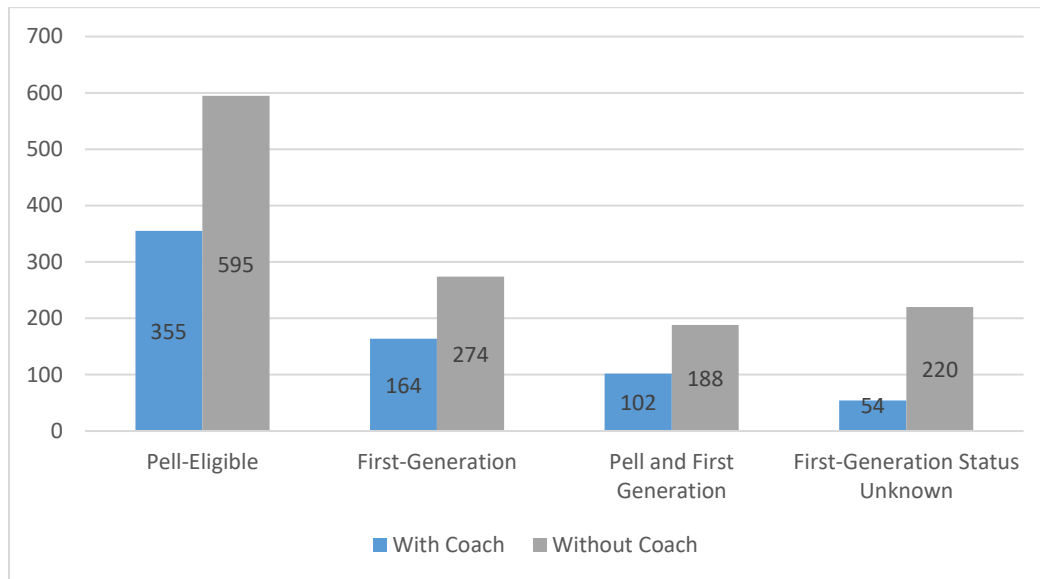


Figure 8.

Characteristics of Students With/Without a Coach at Institution 2



Research Question 1

RQ1: Is there a significant difference in the fall-to-spring retention rate of first-time full-time Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach?

H₀1: There is not a significant difference in the fall-to-spring retention rate of first-time full-time Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach.

A chi-square test of independence was performed to examine the relation between retention and Pell-eligible students with a near-peer coach. There is a significant association between spring retention and Pell-eligible students with a near-peer coach. Pell-eligible students with a near-peer coach are more likely to be retained to spring than Pell-eligible students without a near-peer coach, $X^2(1, N=1250) = 13.88$, $p < .001$, Cramer's $V = .105$. Therefore, the null

hypothesis was rejected. Of Pell-eligible students with a near-peer coach, 88.18% (440 out of 499) were retained to spring compared to 80.16% (602 out of 751) of Pell-eligible students without a near-peer coach, as illustrated in Table 1. Therefore, Pell-eligible students with near-peer coaches were retained from fall-to-spring at a significantly higher rate than those students without near-peer coaches. Figure 9 illustrates the relationship of Pell-eligible students and retention to spring.

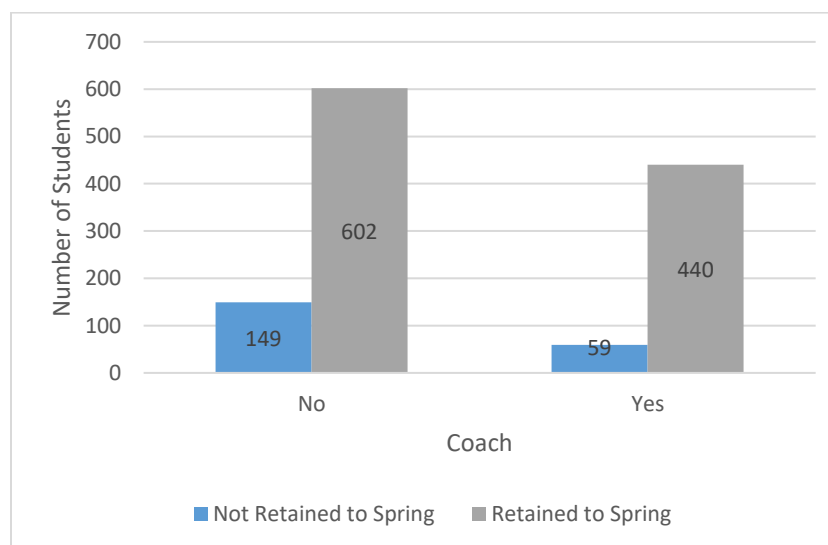
Table 1.

Frequencies for Pell-Eligible Fall-to-Spring Retention

Coach	Retained to Spring				
	No	%	Yes	%	Total
No	149	19.8	602	80.1	751
Yes	59	11.8	440	88.1	499

Figure 9.

Pell-Eligible Students Retained to Spring



Research Question 2

RQ2: Is there a significant difference in the fall-to-fall retention rate of first-time full-time Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach?

H₀2: There is not a significant difference in the fall-to-fall retention rate of first-time full-time Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach.

A chi-square test of independence was performed to examine the relationship between retention and Pell-eligible students with a near-peer coach. There is a significant association between fall to fall retention and Pell-eligible students with a near-peer coach. Pell-eligible students with a near-peer coach are more likely to be retained to the next fall than Pell-eligible students without a near-peer coach, $X^2(1, N=1250) = 15.44$, $p < .001$, Cramer's $V = .1112$. Therefore, the null hypothesis is rejected. Pell-eligible students with near-peer coaches were retained from fall-to-fall at a significantly higher rate than those students without near-peer coaches. For Pell-eligible students with a near-peer coach 73.15% (366 out of 499) were retained to fall compared to 62.45% (469 out of 751) without a near-peer coach as illustrated in Table 2. Figure 10 illustrates the relationship of Pell-eligible students and retention to fall.

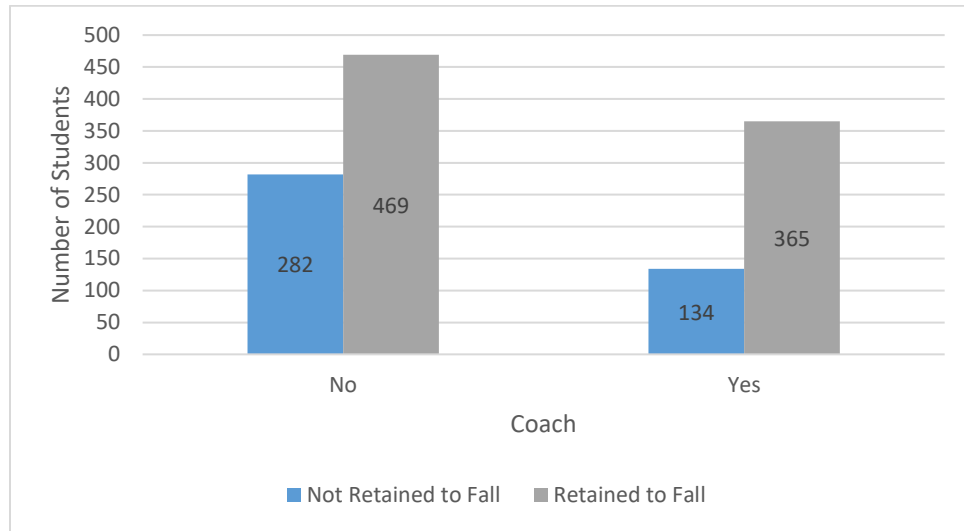
Table 2.

Frequencies for Pell-Eligible Fall-to-Fall Retention

Coach	Retained to Fall				
	No	%	Yes	%	Total
No	282	37.5	469	62.4	751
Yes	134	26.85	365	73.15	499

Figure 10.

Pell-Eligible Students Retained to Fall



Research Question 3

RQ3: Is there a significant difference in the fall-to-spring retention rate of first-time full-time first-generation students with a near-peer coach and that of those who did not have a near-peer coach?

H₀3: There is not a significant difference in the fall-to-spring retention rate of first-time full-time first-generation students with a near-peer coach and that of those who did not have a near-peer coach.

A chi-square test of independence was performed to examine the relationship between retention and first-generation students with a near-peer coach. There was a significant association between fall to spring retention and first-generation students with a near-peer coach. First-generation students with a near-peer coach were more likely to be retained to the spring than first-generation students without a near-peer coach, $X^2(1, N=711) = 29.51, p < .001$,

Cramer's $V = .2037$. Therefore, the null hypothesis is rejected. First-generation students with near-peer coaches were retained from fall-to-spring at a significantly higher rate than those students without near-peer coaches. For first-generation students with a near-peer coach 72.67% (218 out of 300) was retained to spring compared to 11.44% (47 out of 411) without a near-peer coach, as illustrated in Table 3. Figure 11 illustrates the relationship of first-generation students and retention to spring.

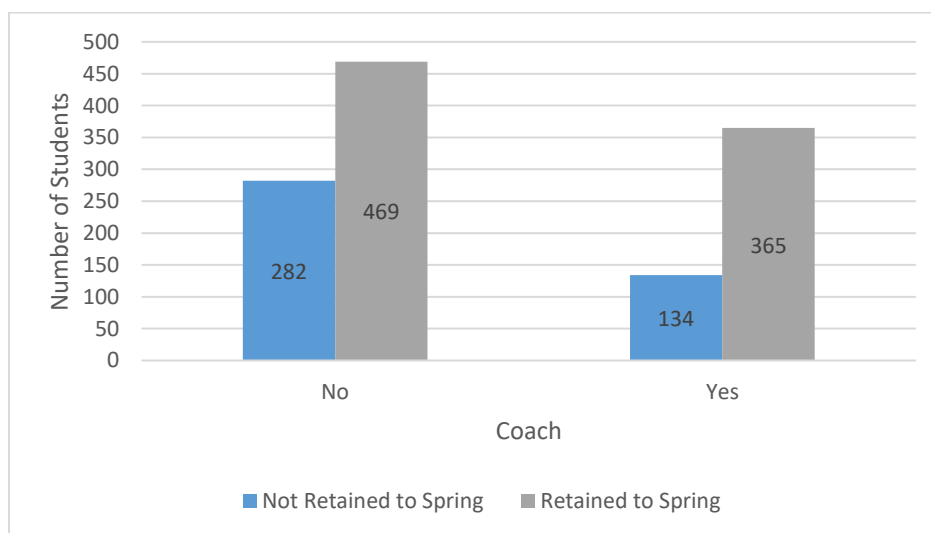
Table 3.

Frequencies for First-Generation Fall-to-Spring Retention

Coach	Retained to Spring				
	No	%	Yes	%	Total
No	82	27.33	218	72.67	300
Yes	47	11.44	364	88.56	411

Figure 11.

First-Generation Students Retained to Spring



Research Question 4

RQ4: Is there a significant difference in the fall-to-fall retention rate of first-time full-time first-generation students with a near-peer coach and that of those who did not have a near-peer coach?

H₀4: There is not a significant difference in the fall-to-fall retention rate of first-time full-time first-generation students with a near-peer coach and that of those who did not have a near-peer coach.

A chi-square test of independence was performed to examine the relation between retention and first-generation students with a near-peer coach. There is a significant association between fall to fall retention and first-generation students with a near-peer coach. First-generation students with a near-peer coach are more likely to be retained to the next fall semester than first-generation students without a near-peer coach, $X^2(1, N=711) = 30.40$, $p < .0001$, Cramer's $V = .2068$. Therefore, the null hypothesis is rejected. First-generation students with a near-peer coach (77.62% or 319 out of 411) were retained to fall at a significantly higher rate than those without a near-peer coach (58.33% or 175 out of 300). Table 4 and Figure 12 illustrate the frequencies of first-generation student retention.

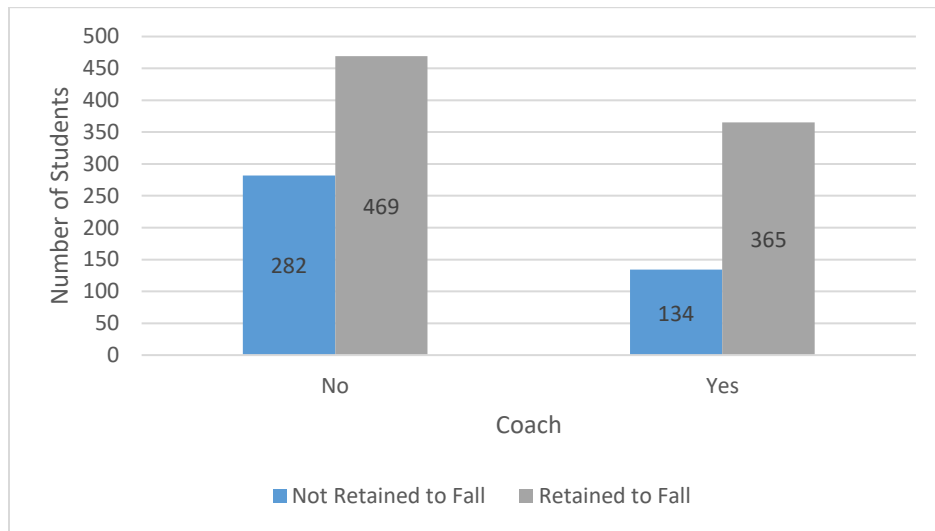
Table 4.

Frequencies for First-Generation Fall-to-Fall Retention

Coach	Retained to Fall				
	No	%	Yes	%	Total
No	125	41.67	175	58.33	300
Yes	92	22.38	319	77.62	411

Figure 12.

First-Generation Students Retained to Fall



Research Question 5

RQ5: Is there a significant difference in the fall-to-spring retention rate of first-time full-time first-generation and Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach?

H₀5: There is not a significant difference in the fall-to-spring retention rate of first-time full-time first-generation and Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach.

A chi-square test of independence was performed to examine the relation between retention and students with both Pell-eligible and first-generation indicators with a near-peer coach. There is a significant association between fall to spring retention and students with both Pell-eligible and first-generation indicators with a near-peer coach, $X^2(1, N=436) = 21.243$, $p < .001$, Cramer's $V = .22$. Therefore, the null hypothesis was rejected. Students with both Pell-eligible and first-generation indicators with a near-peer coach were significantly more likely to

be retained to spring and consequently the null hypothesis is rejected. For these students with a near-peer coach, 89.36% (210 out of 235) were retained to spring compared to 72.14% (145 out of 201) of students without a near-peer coach, as illustrated in Table 5. Figure 13 illustrates the frequencies of students with both Pell-eligible and first-generation indicators retained to spring.

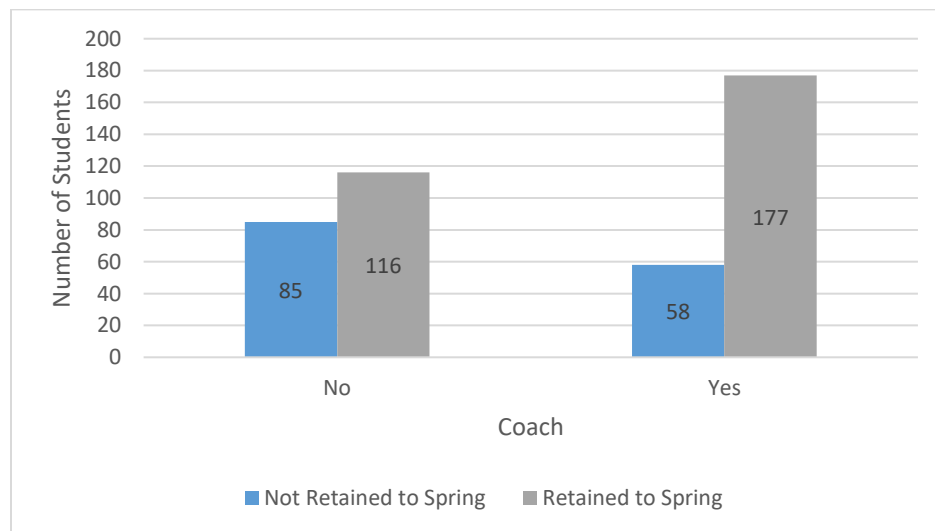
Table 5

Frequencies for Pell-Eligible and First-Generation Fall-to-Spring Retention

Coach	Retained to Spring				
	No	%	Yes	%	Total
No	85	42.29	116	57.71	201
Yes	58	24.68	177	75.32	235

Figure 13.

Both Pell-Eligible and First-Generation Students Retained to Spring



Research Question 6

RQ6: Is there a significant difference in the fall-to-fall retention rate of first-time full-time first-generation and Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach?

H₀₆: There is not a significant difference in the fall-to-fall retention rate of first-time full-time first-generation and Pell-eligible students with a near-peer coach and that of those who did not have a near-peer coach.

A chi-square test of independence was performed to examine the relation between retention and students with both Pell-eligible and first-generation indicators with a near-peer coach. There is a significant association between fall to fall retention and students with both Pell-eligible and first-generation indicators with a near-peer coach, $X^2(1, N=436) = 15.238$, $p < .001$, Cramer's $V = .187$. Therefore, the null hypothesis was rejected. Students with both Pell-eligible and first-generation indicators with a near-peer coach were significantly more likely to be retained to spring. For these students with a near-peer coach, 75.32% (177 out of 235) were retained to spring compared to 57.71% (116 out of 201) of students without a near-peer coach as illustrated in Table 6. Figure 14 illustrates the frequencies of students with both Pell-eligible and first-generation indicators retained to spring.

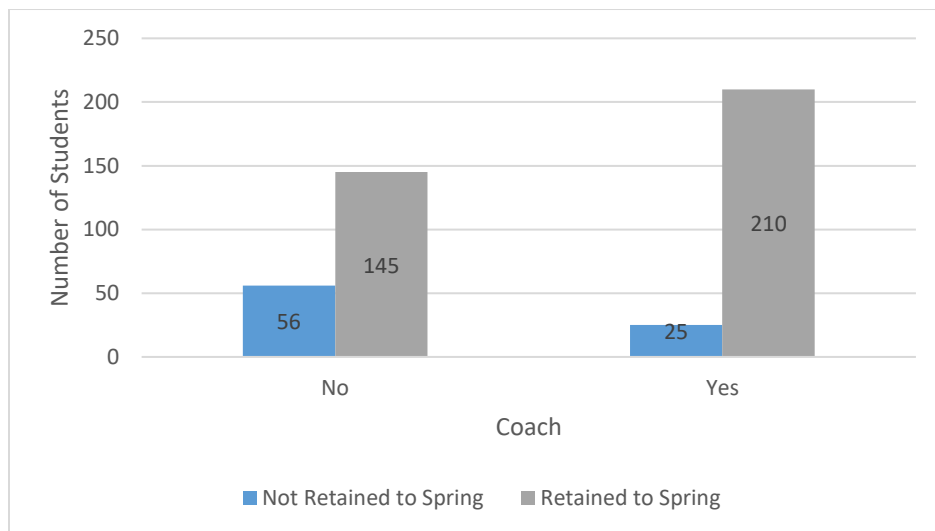
Table 6.

Frequencies for Pell-Eligible and First-Generation Fall-to-Fall Retention

Coach	Retained to Fall				
	No	%	Yes	%	Total
No	56	27.86	145	72.14	201
Yes	25	10.64	210	89.36	235

Figure 14.

Both Pell-Eligible and First-Generation Students Retained to Spring



Research Question 7

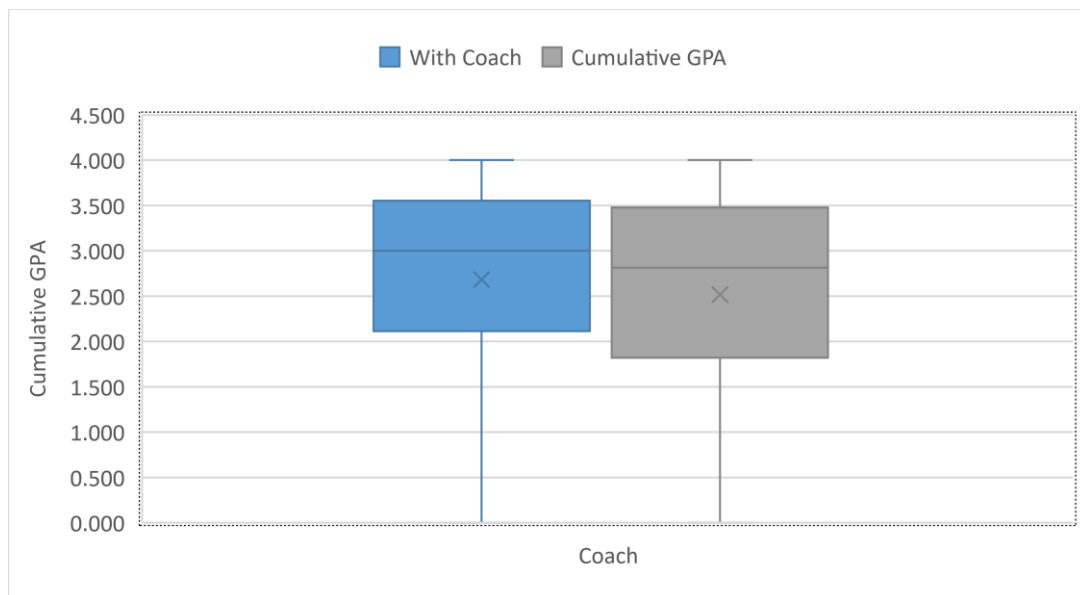
RQ7: Is there a significant difference in the first-year cumulative grade point average between Pell-eligible students who were assigned a near-peer coach and Pell-eligible students who were not assigned a near-peer coach?

H₀7: There is not a significant difference in the first-year cumulative grade point average between Pell-eligible students who were assigned a near-peer coach and Pell-eligible students who were not assigned a near-peer coach.

An independent *t*-test was performed to compare the mean of cumulative GPA of Pell-eligible students with a near-peer coach and Pell-eligible students without a near-peer coach. There was a significant difference in cumulative GPA between Pell-eligible students with a near-peer coach ($M=2.68$, $SD=.05$) and Pell-eligible students without a near-peer coach ($M=2.51$, $SD=1.19$); $t(1248)=-2.46$, $p=.014$. Therefore, the null hypothesis was rejected. In summary, the mean first-year cumulative grade point average for Pell-eligible students who were near-peer coached was significantly higher than the first-year cumulative grade point average for Pell-eligible students who were not near-peer coached. Figure 15 illustrates the comparison of mean grade point average for Pell-eligible students with and without a near-peer coach.

Figure 15.

First-Year Cumulative GPA for Pell-Eligible Students



Research Question 8

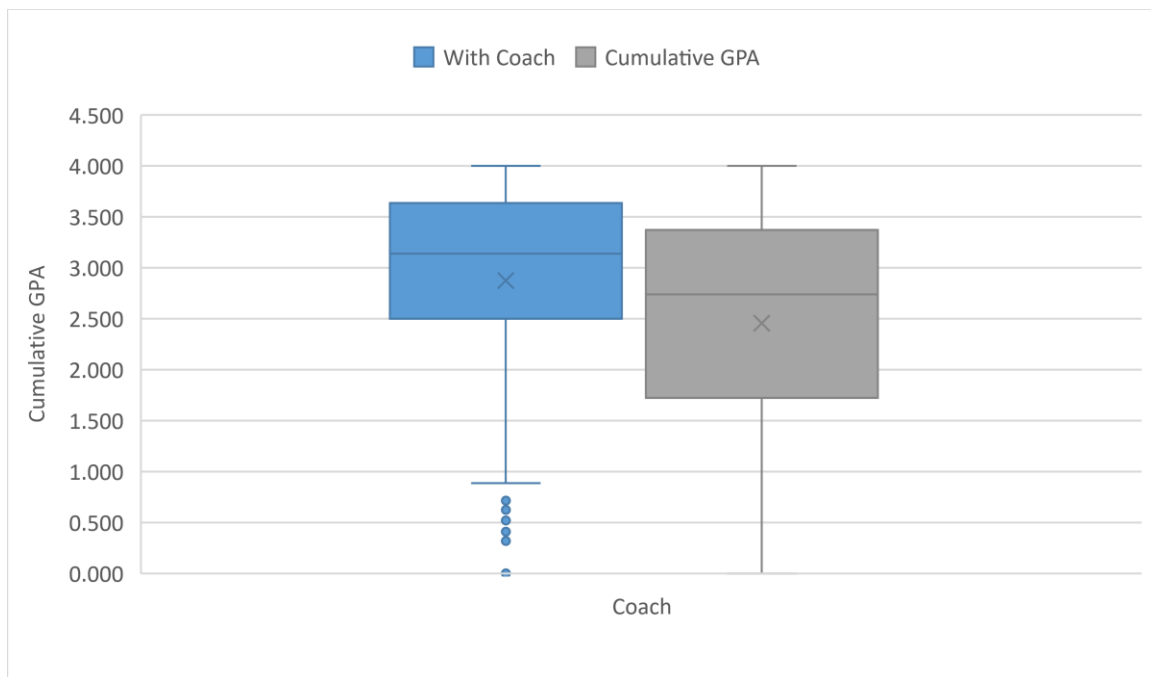
RQ8: Is there a significant difference in the first-year cumulative grade point average between First-generation students who were assigned a near-peer coach and First-generation students who were not assigned a near-peer coach?

H₀8: There is not a significant difference in the first-year cumulative grade point average between First-generation students who were assigned a near-peer coach and First-generation students who were not assigned a near-peer coach.

An independent *t*-test was performed to compare the mean cumulative GPA of first-generation students with a near-peer coach and first-generation students without a near-peer coach. There was a significant difference in cumulative grade point average for students with a near-peer coach ($M=2.87$, $SD=1.04$) and students without a near-peer coach ($M=2.45$, $SD=1.2$); $t(709)=-4.86$, $p<.001$. Therefore, the null hypothesis was rejected. In summary, the mean first-year cumulative grade point average for Pell-eligible students who were near-peer coached was significantly higher than the first-year cumulative grade point average for Pell-eligible students who were not near-peer coached. Figure 16 illustrates the comparison of mean grade point average for first-generation students with and without a near-peer coach.

Figure 16.

First-Year Cumulative GPA for First-generation Students



Question 9

RQ9: Is there a predictive relationship between fall-to-spring retention and near-peer coaching controlling for first-generation and Pell-eligible students?

H₀9: There is not a predictive relationship between retention and near-peer coaching controlling for first-generation and Pell-eligible students.

A logistic regression test was conducted to ascertain the effects of coaching controlling for Pell-eligible and first-generation variables on spring retention. The logistic regression model was statistically significant, $X^2(4)=124.695$, $p<.001$. Therefore, the null hypothesis was rejected. The results indicate there is a predictive relationship between near-peer coaching and retention controlling for first-generation and Pell-eligible variables. Students with a near-peer coach are 2.8 times more likely to be retained to spring with 95% confidence. Controlling for Pell-eligible

and first-generation, not having a near-peer coach makes it more likely to not be retained in the spring with a parameter estimate of .3684, $p < .001$. Table 7 illustrates the likelihood of retention to spring. Students with a near-peer coach, controlling for Pell-eligible and first-generation variables, are between 1.559 and 2.8 times more likely to not be retained with a 95% confidence level as illustrated in Table 8.

Table 7.

Logistical Regression for Likelihood Estimates for Retention to Spring

Parameter		Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept		-1.609	0.072	500.857	<.001
Coach	No	0.368	0.074	24.325	<.001
Pell	No	-0.120	0.057	4.426	0.035
FirstGeneration	No	-0.791	0.078	102.380	<.001
FirstGeneration	Unk	0.708	0.096	54.628	<.001

Table 8.

Logistical Regression for Odds Ratio of Retention to Spring

Effect		Point Estimate	95% Wald Confidence Limits	
Coach	No vs Yes	2.089	1.559	2.800
Pell	No vs Yes	0.787	0.629	0.984
FirstGeneration	No vs Yes	0.417	0.318	0.547
FirstGeneration	Unk vs Yes	1.867	1.343	2.596

Research Question 10

RQ10: Is there a predictive relationship between fall-to-fall retention and near-peer coaching controlling for first-generation and Pell-eligible students?

H₀10: There is not a predictive relationship between retention and near-peer coaching controlling for first-generation and Pell-eligible students.

A logistic regression test was conducted to ascertain the effects of coaching, Pell-eligible, and first-generation variables on fall retention. The logistic regression model was statistically significant, $X^2(4)=115.822$, $p<.001$. Therefore, the null hypotheses was rejected, indicating there is a predictive relationship. Students with a near-peer coach were more likely to be retained to the fall with a parameter estimate of .27, $p<.001$. Table 9 illustrates the likelihood of retention to fall. Students with a near-peer coach, controlling for Pell-eligible and first-generation variables, are between 1.364 and 2.147 times more likely to not be retained to fall with a 95% confidence level. Table 10 illustrates the odds ratio of retention to fall.

Table 9.

Logistical Regression for Likelihood Estimates for Retention to Fall

Parameter		Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept		-0.807	0.058	188.610	<.001
Coach	No	0.268	0.057	21.597	<.001
Pell	No	-0.263	0.045	33.872	<.001
First-generation	No	-0.507	0.064	62.033	<.001
First-generation	Und	0.568	0.088	41.444	<.001

Table 10.*Logistical Regression for Odds Ratio of Retention to Fall*

Odds Ratio Estimates				
Effect		Point Estimate	95% CI	
			LL	UL
Coach	No vs Yes	1.712	1.364	2.147
Pell	No vs Yes	0.590	0.494	0.705
First-generation	No vs Yes	0.640	0.516	0.795
First-generation	Unk vs Yes	1.878	1.394	2.530

Chapter Summary

The results were presented for each research question. All null hypotheses were rejected. Coaching was consistently found to have a significant association on the retention of students, both first-generation and Pell-eligible. Students with a near-peer coach have higher GPAs than students without a near-peer coach. Additionally, the logistic regression analysis indicated there is a strong predictive result in coaching students and retention to both spring and fall. Chapter 5 provides a summary of the results connected to past research and will conclude with recommendations for future research and practice.

Chapter 5. Summary, Conclusions, and Recommendations

In this non-experimental, quantitative study, I investigated the relationship between near-peer coaching and retention of first-time, full-time, Pell-eligible and first-generation college students at two public four-year institutions partnering with the non-profit organization, College Possible. Evidence from this study supports that practitioners should provide intentional programming for students in these at-risk populations to create relationships with near-peers as university retention efforts. This is consistent with the literature and prior research that suggest the importance of offering programs that support low-socioeconomic students and first-generation students in their academic goals.

This study involved Pell-eligible and first-generation students at two four-year institutions partnering with the College Possible near-peer coaching program. College Possible provides training and development of near-peer coaches including oversight of the programs at each partnering institution. By using the coaching program by College Possible, there is consistency in knowledge and abilities of the near-peer coaches as well as consistency in the program operations at both institutions. The data on 2849 students was from the complete first-time full-time cohort that began college in fall 2019. Near-peer coaches manage a student portfolio of 120 new students each year. 752 Pell-Eligible students and 300 first-generation students did not receive a near-peer coach and therefore used as the comparator group.

This study involved analysis of retention data of Pell-eligible and first-generation students with near-peer coaches compared with the Pell-eligible and first-generation students without near-peer coaches. Students were randomly assigned near-peer coaches by each institution. Chi-square analyses were conducted for Research Questions 1-6. A series of independent *t*-test analyses was conducted for Research Questions 7 and 8. Logistical regression

analysis, best used for predicting categorical data, was conducted for Research Questions 9 and 10.

Summary of the Findings

The overall results of this study are consistent with prior research and theories presented. Tinto (1993) and Astin (1993) both indicated the importance of peer interaction and the influence peers have on departure and retention decisions of other students. Results were similar in that students with peer intervention were being retained at statistically significant higher rates than their comparison groups without some level of peer intervention. The results demonstrated significant associations of retaining first-generation and Pell-eligible students who are assigned a near-peer coach. First-generation and Pell-eligible students are more likely to be retained to the next semester if they have a near-peer coach.

Research Questions 1 and 2 tested for significant association between retention and Pell-eligible students with and without a near peer coach. Research Questions 3 and 4 tested for significant association between retention and first-generation students with and without a near-peer coach. The results from Research Questions 1-4 indicated a strong significant association of near-peer coaching on Pell-eligible student retention for both fall and spring as well as first-generation student retention for both fall and spring.

One unanticipated demographic was found that students who were not identified as either first-generation or not emerged as first-generation status unknown. When the chi-square test was used to analyze data for this group and their retention, they also reported a significantly higher retention rate both spring and fall retention. In other words, first-generation status unknown students with a near-peer coach were more likely to be retained to the next semester than those

without a near-peer coach. This result could indicate the likelihood that near-peer coaches could influence all student retention and not only the students who are first-generation or Pell-eligible.

The results from Research Questions 5 and 6 indicated a strong significant association of near-peer coaching on students who have both Pell-eligible and first-generation indicators on retention for both fall and spring. Retention results indicated a strong significant association for both fall and spring retention.

Analyses for Research Questions 7 and 8 indicate a strong relationship between GPA and near-peer coaching. Students with a coach had higher cumulative grade point averages than those without a coach. There was no significance in the relationship between non-Pell-eligible students with a coach. Research Question 8 focused on first-generation students and also indicated a strong significant relationship. For the first-generation unknown group there was no significant association found with GPA and near-peer coach. However, there was a strong significance found in the non-first-generation students with a coach. Non-first-generation students with a coach were more likely to be retained. This could be due to the fact that non-first-generation students with a coach could be in the Pell-eligible group, which also reported a strong significance.

For Research Questions 9 and 10, logistical regression analyses were conducted. Students with a near-peer coach, controlling for Pell-eligible and first-generation indicators, were more likely to be retained for spring and fall. Students without a near-peer coach were less likely to be retained in the spring. Therefore, this information is indicative that having a coach is advantageous to all students.

Conclusions

Astin (1993) and Tinto (1993) indicated that peers are the most influential on students' decisions to depart and that the most important interactions students have are with their peers. Eimers and Pike (1997) found that peers have a positive influence on other students' intent to persist at the institution. Bank et al. (1990) indicated that peer influence also affects actual persistence to the second year. The results from this study are consistent with this research.

The findings are promising since the sample size is large, extends to multiple universities, and the commonality in the dataset including consistent facilitation of the intervention at each institution. The near-peer coaches at both institutions are participating in continued training which ensures consistency in daily practices with their students. The findings support a strong significance and it is unlikely the results would change if expanded to a larger sample size. Conversely, it is unknown if the near-peer coaching concept would work at other types of institutions or with other types of students.

Financially, the university is positively affected by the results of this study. Students who depart from the institution causes loss of expected tuition. Keeping a student through to graduation ensures the university at least 8 semester of tuition roughly estimating \$26,880 per student. The results of this study indicated the retention rates for Pell-eligible students were 8% higher than non-coached for fall-to-spring and were 10.75% higher than non-coached for fall-to-fall. Meaning, the university gained 8% more students in the spring than they would have if they had not had the coaching program generating an estimated \$117,600 in tuition. Pell fall-to-fall retained 10.75% more than non-coached roughly totaling \$249,438 in tuition. First-generation fall-to-spring resulted in 15.89% roughly totaling \$194,341 in tuition and for fall-to-fall a 19.26% roughly totaling \$206,436 in tuition. The university financial gain could total \$767,815

in only one year. Therefore, the potential financial gain for supporting these students positively impacts the university budget in continued tuition generation. Additionally, the funding formula usually provides institution's bonuses on increasing or meeting benchmarks for students in these demographics and therefore would increase the financial benefits. However, to find the exact financial gain the university would need to compare the retention of 2018 and 2019 cohorts.

It is important to note that the cohort included in the research was impacted by COVID-19 in March of the spring 2020 semester, therefore, the global pandemic may have affected the results. Nonetheless, there is ample evidence to indicate that near-peer coaches were still able to support their students during a pandemic and ensure their students were retained. One could infer from the data that near-peer coaches were well trained on topics prior to the pandemic which became even more important during the pandemic. Davis (2020) found that first-generation students reported barriers in persistence, relationships, employment, health and finding resources. These are the very topics on which coaches receive training and extensive development throughout the entire year. Students were engaging with the coaches early in their first-year and had built strong relationships with their coach prior to the pandemic. These students would have felt comfortable reaching out to their coaches during a time that was unprecedented for support.

Additionally, institutions quickly created and altered interventions during COVID-19 in order to encourage students to re-enroll in the fall 2020 semester, which could have included awarding financial grants to students, having faculty and administrators call every current student to help them re-enroll, or lending technology and providing wifi for free. It is possible these interventions could have affected the fall to fall retention results. The results included a 10% increase in retention from fall to spring and a 20% increase from fall-to-fall. Students

usually depart from the university after their first year, resulting in a larger decrease in fall-to-fall retention than in the fall-to spring retention numbers. The results in this study indicated a higher retention percentage in the fall-to-fall than in the fall-to-spring. It is unknown if these special intervention programs that have never been part of regular operations had an effect on the retention of these students but should be considered.

Researchers are unable to fully predict or discern the impact of COVID-19 on retention at this point, however, an article from the Chronicle of Higher Education (Patel, 2020) reported the impact of one institution's peer mentoring program during the Covid-19 pandemic was a 15% increase in enrollment due to the retention of current students to the next year. The university credited the increase in enrollment during a global pandemic to their peer mentors who supported their students during the unique challenges.

However, what is unknown in this study is the level of engagement each student had with the near-peer coach. The near-peer coaching program does not require participation, so not all students may have responded to the outreach of their coaches and therefore may not have built a meaningful relationship with their coach. Since the university assigned the students to near-peer coaches, some students may not have easily related to their near-peer coach or may have uncomfortable working with the assigned near-peer coach. On the other hand, having a near-peer coach assigned to a student ensured the student was getting information from the near-peer coach regularly, whether or not they respond to the outreach. Therefore, the results could have represented an unintended effect from students who had a near-peer coach but who had not yet formed a relationship with their near-peer coach.

Recommendations for Practice

As a result of this research the following recommendations for practice are presented:

- Universities should offer or increase the number of College Possible near-peer coaches available to Pell-eligible and first-generation students.
- Use the results of this research to illustrate to administrators the importance of serving the Pell-eligible and first-generation population and how a formalized near-peer program could impact the student retention and financial implication for the institution.
- Data on first-generation and Pell-eligible students should be shared to campus administrators in order to directly support and impact the retention of this population.
- Universities should adopt a definition for first-generation students for their campus and require students to indicate if they are first-generation according to their definition.
- Provide data on first-generation and Pell-eligible students to appropriate programs offering unique support for the student population.
- Educational leaders should leverage policy for new students being admitted to the university with these at-risk indicators. Requiring students to connect to coaches early in their on-boarding could impact the overall university retention.
- Create training for peer leaders on the importance of peer influence and how they can affect new student retention and persistence.

Recommendation for Further Research

The results have provided promising feedback in the current scope of research. There are other areas of near-peer coaching that could be beneficial to institutions as they continue to support the Pell-eligible and first-generation student. The following recommendations for further research are presented:

- Expand on peer influence research to include exploring how coaching is different from mentoring.
- Use qualitative measures to investigate the quality of contacts and interactions students have with the near-peer coaches by soliciting interviews with the students being coached on their coaching experiences.
- Investigate whether the number and type of contacts is related to GPA and retention to understand the most effective number or type of interaction between student and near-peer coach.
- Conduct a longitudinal quantitative study on the relationship of near-peer coaching on completion rates. I recommend continuing the research and following the 2019 first-time full-time cohort with near-peer coaches through to degree completion.
- Expand the program and research on near-peer coaching for this population at community colleges.

Chapter Summary

The results of this study supported the previous research findings on peer influence on retention. However, the interventions from the institutions during COVID-19 could have affected the fall-to-fall increase in retention. The level of engagement of each student with their coach is unknown and should be studied further. It is important to continue researching this topic to add more literature on coaching as it pertains to retention of first-generation and Pell-eligible students. This study has shown the impact near-peer coaching has on influencing successful transitions, retention, and overall support of first-generation and Pell-eligible students.

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