Beyond Admission: Reducing Opportunity Melt and Supporting a Successful Transition by Proactively Assigning Peer Mentors to Incoming Students at a Large Public Regional University

by

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ABSTRACT

The transition from high school to college can cause an undue amount of attrition for fully qualified, college-intending first-generation students. Although the students may have overcome multiple obstacles to be accepted to a college and arrive at the transition over summer, it can feel overwhelming to complete the flood of tasks without access to a supportive network to guide and interpret the intricate steps. Many programs focus on college preparation and access to college but do not devote attention to the delicate transition from access to enrollment during the summer months. The term opportunity melt for students who confirm their enrollment and do not enroll in any institution of higher education in the fall semester. This study identified the influence of strategic peer mentor support during the summer months for Chico State students who applied, were admitted, and accepted their college admission. This action research intervention applies key concepts of academic capital theory and follows up on previous cycles of action research in the California State University system to identify barriers for those who intended to enroll but decided not to attend any Cal State or other institution of higher education in the Fall semester after high school graduation.

DEDICATION

To the aspiring college-intending students that are looking to fulfill their dreams of graduating college. And simply need a little guidance and support during their transition.

ACKNOWLEDGMENTS

I could have not begun and completed this journey without the love and support of my wonderful wife, Cheryl. From the motivation to begin the program, to continuous support along the way. You have been my rock and I am incredibly grateful to have you in my life. You were the listening and guiding ear that I needed. Thank you for always being there for me from start to finish, including returning to the program after a year absence. I couldn't have asked for a better partner. Love you, Cheri.

Alan Shetley, my former military mentor. When I decided to join the military after high school you encouraged me to pursue a college degree. You saw something in me at a young age when others didn't. You provided guidance when I needed it. Your support over 20 years ago has developed to help create their research study. Your guidance, mentorship, and patience lives on.

Finally, to all of the student leaders who I have had the pleasure of working and learning of the years. Thank you for teaching me how to better support students in transition. The lessons I learned from you all were included were the bedrock of this study.

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CHAPTER 1

INTRODUCTION

My problem of practice is the challenge of how to support high school students transitioning to college and have confirmed the intention to enroll at California State University, Chico. The summer months between high school graduation and the first day of college can leave incoming college students consumed with mixed emotions. It can be a moment of fulfillment, but also excitement about the next steps for those pursuing a dream of higher education. Some take advantage of the time to relax with family and friends before moving away. On the opposite spectrum, one may feel stressed working multiple jobs to afford the looming college expenses. Anxiety with the unfamiliar, fitting in, college compatibility, and imposter syndromes may also accompany the pending change. At some point, the first-time transitioning students may critically consider the realities of their future environment and experience a tumble of emotions in the span of the critical transition period.

Expectant new college students will soon realize that admission to a university does not automatically equate to matriculation. Most schools require completion of a series of tasks during the transition, or entry to college classes will be denied. These can range from final transcript submission, proof of immunization records, and completing all necessary placement exams to finalizing financial documentation, securing housing, orientation registration and attendance, and others. The vital word is *completion* of complex tasks required for enrollment, as these processes can be initiated but can be challenging to complete. College-seeking students can lack the necessary skills, resources, and direction to navigate this process, especially low-income first-generation

college students who may no longer have access to high school counselors, lack an understanding of how to navigate college support services, or have a void in support as students may not belong to a high school or college during this time (Castleman & Page, 2014). Although the students may have overcome multiple obstacles to be accepted to a college and arrive at the transition over summer, it can feel overwhelming to complete the flood of tasks without access to a supportive network to guide and interpret the intricate steps.

Lack of guidance and assistance from parents or mentors can make it more difficult to navigate the uncharted environment and appear all the more intimidating. Students waiting for added assistance and direction from the chosen college may need but not receive personal reminders of uncompleted tasks (Arnold, Fleming, DeAnda, Castleman, & Wartman, 2009). As self-doubt and uncertainty about how to proceed persist, many students question whether they should even go to college, and after having dreams of pursuing a course that included higher education in their immediate future, they may select a different path.

There is a term "summer melt," which refers to students who do not enroll in Fall courses after being admitted and formally declaring their intention to pursue a degree at a specific institution (Arnold, Chewning, Castleman & Page, 2015). Nationally, 10% of students fall victim to summer melt from all socioeconomic backgrounds (Castleman & Page, 2014), although this phenomenon occurs more frequently for students from a low-income background. A variety of factors, including income barriers and spending more energy contemplating how to afford their immediate next steps, or working over the

summer months, contribute to 20% to over 40% summer melt for low-income students (Arnold, et al., 2015).

Summer melt threatens the ability of colleges to provide broad access. Nationally, there have been additional efforts to recruit a diverse population of students and a commitment to college preparation, up to and including the point at which colleges send out acceptance notices. Many programs focus on college preparation and access to college but do not devote attention to the delicate transition from access to enrollment during the summer months. Additional focus should be placed on helping students make a successful transition to college, especially for all who have been admitted and formally committed to attending postsecondary education (Rall, 2014).

Before the first day of class has even begun, summer melt affects the number of students who will earn a degree. If college-intending students do not arrive on campus they will be less likely to ever obtain a degree. Not only can this difference in college attendance increase the socioeconomic gap, but it also hinders national goals to provide the United States a more educated workforce and satisfy the needs of employers. I use the term opportunity melt for students who confirm their enrollment and do not enroll in any institution of higher education in the fall semester. It is more defined than summer melt, which can apply to incoming students who have decided to attend a separate institution. Only 29% of low-income students start a college degree by age 25, compared to 80% of individuals in the highest income quartile (Bailey & Dynarski, 2011). If the current trend persists, the State of California alone is projected to fall over 1 million people short of the number of college graduates necessary to meet the economic demand in 2030 (Public Policy of California, 2018). As achievement gaps remain, colleges

should be mindful that they cannot afford to lose college-intending students who have already demonstrated the necessary skills and desire to seek high education (Rall, 2014). Rather, institutions of higher education need to examine the opportunity gap that leads to the achievement gap. Educational opportunity gaps consider systemic inequities and reduced prospects, not the failings of the individuals (Mayor & Suarez, 2019).

Although the reasons that students do not enroll at an institution after confirming their intention to enroll can vary for the individual student, there are common themes. As the majority of students do not receive financial aid counseling in high school prior to graduation, it is not surprising that summer melt has a tendency to be predominant among students from a low-income background (Castleman & Page, 2014). In addition, students are entering a new environment, often with little support. Students may be overwhelmed with the hurdles because support is lacking in the transition, including difficulty in locating a college representative who can help (Castleman & Page, 2014). As Castleman and Page (2014) also note, students' unfamiliarity in navigating the complex bureaucratic steps can equate to students' being more hesitant to reach out to their desired college during the transition.

Some colleges have encountered success when they have applied chatbot assistance or fostered strong relationships with feeder high schools, but many institutions remain deficient in transitional support. Summer bridge programs can yield positive results, but a strategic intervention to fully meet the needs of all of the transitioning students is lacking. The summer months can be a limbo period, one when the young adults no longer have an active connection to their high school community and resources, but they are not yet a current member of their intended college with sufficient

relationships to feel comfortable asking questions (Castleman & Page, 2014). The emphasis for many secondary schools has been to help students apply and be admitted to a college. Most orientation programs, on the other hand, place greater emphasis on tracking students once they arrive at orientation and begin their progression to enrollment and attendance. The transition phase from committing to a university until their first formal engagement, which is usually orientation requires further examination to best understand the factors that influence students withdrawing and how to best support them during this period.

Castleman and Page (2014) note that while attrition from college in the prior summer tends to be higher in community colleges, it is a significant presence for four-year institutions. There are a variety of reasons why students do not persist. Although students may change their minds regarding their future in higher education, some may be unaware of the payment options or borrowing costs (Arnold et al., 2015), unfamiliar with college portals that list required tasks (Castleman, Page, & Schooly, 2014), unable to complete recommended requirements (such as applying for FAFSA) because of the complexity of paperwork (Avery & Kane, 2019), unwilling to depart their current lifestyle (relationships, employment), or anxious as they anticipate a new setting. In addition, students from disadvantaged backgrounds may miscalculate the true cost of expenses (Avery & Kane, 2019; Grodsky & Jones, 2007). Any one of these variables or a combination can lead to opportunity melt.

Local Context

On average, over 16 % of all incoming first year students who have formally committed to attending the California State University, Chico, never begin their academic

career at the institution. This represents nearly 500 students who applied, were admitted, and formally committed to Chico State but never attended in each year (2017 – 2019). This study seeks to implement and evaluate concrete assistance to support the students in transition.

Chico State is the second oldest institution in the nation's largest higher education system, the California State University. Unlike most of the 23 California State Universities, Chico State's 16,000 students would consider the college a residential one with the majority of students living within a two-mile radius of the campus. Although the city's population of 90,000 is one of the largest in Northern California, it is surrounded by rural expansive agricultural-based communities in Northern California. The University has a unique blend of students who comprise the diverse geographic makeup of the state. About a quarter (26%) reside in the city of Chico and surrounding smaller communities, followed by the San Francisco area (23%, 160 miles away), Los Angeles (21%, 450 miles), Sacramento (11%, 90 miles), other states, (2%) and the remaining regions of California (18%) (California State University, Chico, Office of Institutional Research, 2021). In addition, over half of the student population identifies as first-generation college students, up 12 percentage points from the incoming students in 2011 (California State University, Chico, Office of Institutional Research, 2021).

The school's demographics have been changing significantly over the past few years. As recently as 2012, White students represented 56% of the population while the Hispanic student population comprised of only 19%. In 2021-2022, the two populations of students are almost equally represented (White 42%, Hispanic 40%), followed by students who identify as two or more races (6%), Asian American (5%), Black/African

American (2%), non-resident (1%), Native American (1%), and unknown (3%) (California State University, Chico, Office of Institutional Research, 2021). The Latinx population is now the largest incoming student population, and the institution is now classified as a Hispanic Serving Institution.

For the past five years, first-year prospective student applications have averaged almost 23,000. However, because of the pandemic and a declining pool of young-adult high school graduates in California the 2020 – 2021 cycle saw an 8% decline in applications (Chico State, 2021). Until 2018, Chico State was consistently admitting around 65% of its incoming class of students. The 2020 – 2021 cycle skyrocketed to a 90% admission rate. Approximately 2,600 first-year students have enrolled on average the past four years.

The path to enrollment begins with admission to the institution and students' formally accepting the offer by the May 1st deadline. Once the students formally commit to the university, they are directed to complete a checklist of items, and the Chico State Admissions department emails them periodically in the summer to inform them of remaining requirements: Orientation registration, completing of placement exams, outstanding admission documents, financial aid document submission, and housing registration. I oversee New Student Orientation, a non-mandatory event that occurs in June and July. We ask students to attend one of 14 offered sessions depending on their major of choice.

At orientation, students meet some of their future professors, receive formal academic advising and registration assistance, learn the benefits of a variety of campus resources and services, meet other incoming students, and receive guidance on overall

navigation to the institution. Historically students would need to attend orientation in-person, with the cost of attendance before 2020 at $95, plus travel expenses students would be responsible for. Students unable to attend would receive much less support and guidance: The students would be referred to academic advisors to receive course counseling, and support outside of advising has been limited.

The lack of support for first-year students during the transition was evident, as self-identified first-generation students were 7.5% less likely to participate in orientation and 3.9% less likely to enroll in fall courses from 2017 to 2019. The period between formally accepting admission (May 1) and Orientation attendance (June - August) is the stretch of time where we see attrition among the majority of students who are lost to opportunity melt. Previous cycles of action research have recognized a need to enhance relationship building throughout the summer. Communication to students during this period has been limited to a few reminder emails. Failure to complete certain items by the respective deadlines will generally result in a rescinded admission status. There has been limited support for students in the months between confirming their enrollment (April or May) and the start of orientation (July).

New Student Orientation in June and July provides admitted students an opportunity to build a connection to the University by learning academic policies, support services, campus resources, participate in an initial academic advising meeting, and provide all incoming students with support in their transition. When students attend the mandatory program there is a 97% probability that they will enroll and attend courses in the Fall semester. However, many students do not participate in the Orientation program. Of the population of students who confirm their intention to attend Chico State, a

significant portion (21%) do not attend the orientation program. Of the students who do not attend Orientation, fewer than half (40%) end up enrolled in fall courses. Therefore, there is a clear gap in support in the three-month window between a student's decision to be a college student at Chico State and their attendance at an orientation session. As Orientation is a driver of enrollment but is not mandatory, additional outreach is needed to support orientation involvement.

Over half of the incoming student population are self-identified first-generation college students. More than 65% receive some type of financial aid (National Center for Education Statistics, 2018), and 90% of students are under 25 years of age and attend school full-time. The Admissions department is aware that a certain proportion of students will not persist. The attrition is included in the forecast of expected students each semester. When I asked in 2019 why we do not have an intentional plan to retain all the students who have committed, I was told that this has not been a high priority for the administration, or most college administrations around the country. The institutional priority only arises once students attend orientation and are enrolled on the first day of classes. The summer is thus a limbo period where the students have been admitted to the University, and are committed to attending, but are not fully considered Chico State students. As one staff member told me, "We are being analyzed by our graduation rates, and these students aren't included in the data at this point. Why would the University want to go after students who are on the fence about attending? They would be a high drop category, which would impede the overall graduation rate numbers."

With new leadership and new funding from the State of California, course availability increased and four-year graduation rates rose over seven percentage points

between 2015 and 2020 (California State University, Chico - Graduation Initiative, 2020). As more students graduate, the institution will need to retain students who are in the admitted pool of students to maintain the current number of enrolled students. The institutional dilemma is that there has been no additional support created for students when transitioning from the written commitment to the orientation stage.

No clear or coordinated communication plan to keep students engaged during this period exists. Enrollment management has relied on only email. There have been no proactive check-ins in the form of a personalized phone call, social media outreach, or text communication campaigns. The Admissions department's goal is to help students submit their intent to enroll and notify them that Orientation is their next requirement. The Orientation office informs students to register for Orientation and questions will be addressed at that time. During this crucial transition period there is limited contact from these two departments. In addition, the two departments have different reporting structures. The Admissions department is housed under the Associate Vice President for Enrollment Management, Orientation reports to a different reporting structure, the Director for Student Life & Leadership. Therefore, one department is preparing to work with the new students but has not yet been introduced, and the other department is in the process of handing off the responsibility.

To further complicate matters, students are reminded of the following requirements during this time: submission of all official transcripts, advanced placement or college coursework, immunization records, English and math placement assessments, student ID card picture, finalized housing paperwork, participation in a grit survey, and completion of financial aid documents. Unfortunately, students are provided with a

surplus of information and tasks in a short time, an influx of requests which can lead students to feel overwhelmed for students not familiar with college. Students must either come to the campus in person, email or call if they have questions. There are no social media platforms, or other proactive communication on behalf of the University to help the students remain engaged. In these crucial months, the Admissions department is also balancing the needs of students against an additional 1,500 transfer students who plan to enroll in the University.

Since high school will have ended for most students, many will not be able to ask their former teachers or guidance counselors for assistance in that transitional summer (Arnold et al., 2015). With the lack of previous mentorship, **c**ombined with the fact that over half of Chico State students self-identified as first-generation college students**,** it is no surprise that incoming students can struggle with understanding college expectations in this interim period. In addition, many parents' first language is not English.

Until 2019, the orientation program has focused on an event called Orientation, not on the transitional experience that occurs prior to orientation or once the event concludes. Chico State students have mentioned that they wished they would have known about important information prior to the start of orientation. For example, our residence halls are usually at reservation capacity by early May and have a waiting list by the month of June. Students who are seeking housing later may not understand the off-campus housing options, another complication that can lead to summer melt.

Proactive outreach and support in the months leading up to orientation attendance is a new concept for many Universities, including Chico State. My colleagues and I noticed the aforementioned issues and were able to generate financial support to purchase

an online orientation program from an external vendor in 2018. This online orientation program package eliminated the previous need to travel to Chico State's campus for all summer orientation events. Representatives from a reputable company worked with us to create engaging videos and text that inform students of a variety of important topics via a series of modules. Completing the modules takes about 60 minutes, but can be started and resumed at the learner's pace. The program covers basic academic information to help bridge the transition to the school, while also providing access to help and policies, campus services, whom to contact and when, and tips to be better prepared at orientation. Housing these important topics under one program and presenting it in an engaging way may be able to assist with the transition. Parents could also remain connected in the early summer months by having access to the online modules.

A well-produced online program is not enough, and personal contact is an essential complement to both recruitment and follow-up. The University has placed more admission recruiters in low-income communities to encourage college application and attendance. But students from these communities cannot earn a college degree if they do not make it to the first day of college. My department employs 35 student employees who have historically worked only during orientation sessions. These employees receive extensive training working with fellow students in transition and can be employed to begin outreach and begin building relationships to fellow students early in the transition cycle as multiple touches, not just one at Orientation, are important to support incoming students.

This study identified the influence of strategic peer mentor support during the summer months for Chico State students who applied, were admitted, and accepted their

college admission. This intervention follows up on previous cycles of action research in the California State University system to identify barriers for those who intended to enroll but decided not to attend any Cal State or other institution of higher education in the Fall semester after high school graduation. For my dissertation cycle of action research, I implemented a peer mentor program because recent high school graduates tend to relate more easily to similar aged peers (Cassleman & Page, 2014). In addition, Berman, Ortiz, and Bos (2008) demonstrated how outreach from peer mentors can have a positive effect on how high school seniors engage in the college process. Having a person around the same age that has recently completed the transition and is successful in college may help the incoming student ask questions to an approachable peer.

In a concrete demonstration of the value of peer mentoring, Castleman and Page (2014) paired high school seniors with college peer mentors and found that students with unspecified college plans and participated in the support program were significantly more likely to enroll on time in a four-year institution. Castleman and Page did not implement what this dissertation describes, but their work shows the general value of peer mentoring to boost college enrollment. The approach of peer mentoring, combined with the application of academic capital theory (further explained in chapter two), provides a guiding framework for the peer mentors to deliver timely information, expand the students' network and connection to campus, while future encouraging success at the university.

Purpose of the Study

The purpose of the study is to examine the influence of an assigned peer mentor in relation to attrition to college for first-generation students. Current college students

who have been trained to work with new students will be paired to work and support incoming first-year students over the summer transition to college. The peer mentor served to promote important matriculation and college preparation reminders, vital deadlines, general advice and be a personal contact who is accessible to students throughout the duration of the transition. Peer mentors aim to engage in developing the incoming student's academic capital, or process to create knowledge to navigate the college going process. Current students were trained to field messages in a more timely manner than if the student called most Chico State offices. If peer mentors could not address questions, they connected their mentees with the correct departments and coach mentees on how to locate proper assistance.

Research Questions

To best understand the intervention to reduce opportunity melt at Chico State University, the study addresses the following research questions:

1. What is the influence of a peer mentor assigned to incoming first-year, first-generation Chico State students on retention through the census date of the fall 2021 semester?
2. How do incoming first-year, first-generation Chico State students perceive the increase in academic capital through their experiences with an assigned peer mentor?
3. To what extent do incoming first-year, first-generation Chico State students perceive the support from their assigned peer mentors in successfully navigating all new student requirements (Orientation attendance, securing housing,

enrollment, transcript submission, financial aid/fee payment planned, attendance at census date)?

CHAPTER 2

THEORETICAL PERSPECTIVES AND RESEARCH GUIDINGING THE STUDY

This chapter will outline the two theoretical perspectives that were applied to the relevant research on summer attrition and will guide the study. In addition, I will share relevant literature on the topic of summer attrition, assessment of practices, and findings from previous cycles of action research at the local context, and how the intervention is intended to examine the influence of summer melt by applying the two theories; Schlossberg's transition theory and academic capital theory. I will first introduce Schlossberg's transition theory and accompanying literature that applies to each element of the research approach. The theory provides a perspective to examine the transition from various angles and explains why different students struggle or succeed when they encounter the same experience. The second theoretical lens, academic capital theory, will follow, which provides an equitable framework to help students and families ease concerns by education on cultural capital and extending one's network when entering the collegiate environment.

The study of summer melt, and more specifically opportunity melt, has not gathered significant attention. Analysis of the college decision process and college preparation has been studied extensively, while additional literature has focused on retention of students after matriculation (Castleman & Page, 2014). Although recent attention has been allotted to the topic of summer melt, and college attrition during the summer months is widespread, the phenomenon of summer melt has not warranted much formal literature research interest (Bozick & DeLuca, 2005; Castleman, Page, & Schooly,

2014; Rall, 2016). This study contributes additional research to students who aspired to attend college but did not enroll in the Fall semester.

The intervention was designed to examine the consequences of a peer mentor assigned to first-year, first-generation students. The term opportunity melt was selected because it examines the population that the study was seeking to serve: first-generation college-intending students who confirm their intention to enroll at a university and are not enrolled in any institution in the fall semester. Summer melt is a much broader term that includes this population, but also can refer to populations who intend to enroll and simply decided during the transition to attend a separate college. This study sought to intervene during the transition to support first-generation students, a group that has a higher likelihood for opportunity melt and where there is an important institution mission to support their original intent of attending college.

Schlossberg's Transition Theory

Schlossberg's transition theory administers a fundamental framework to grasp the experiences, challenges, and impact of a person in transition. The theory defines a transition as an event where one experiences changes in roles, routines, assumptions, and studies the adaptation of integrating these changes into one's daily life (Schlossberg, Waters, & Goodman, 1995). In addition, it examines the different types of transition (anticipated, unanticipated), the context, influence, and individual perception of the transition, which can be perceived as positive, negative, or irrelevant.

The transition is further understood by applying the four Ss (Situation, Self, Support, and Strategies) to study experiences entering the change and how one responds in the new environment. Individual assets and liabilities can be applied to each coping

factor and can greatly influence the difficulty or ease of the transition (Schlossberg et al., 1995). See Table 1 for a representation. For example, a student who is academically gifted (asset) may also reside with a family who does not possess the network or cultural capital to provide sufficient guidance (liability). The model helps frame and provide context on how various individuals may experience the same transition differently. The theory also provides overall guiding principles of experiences endured while moving in, through and out of a transition. This research will focus primarily on moving into the transition from high school to college.

I selected this particular theory because it pays attention to the individual experiences and to what degree coping strategies are available to adjust to the new environment. The theory focuses on life events that entail change and can be applied to graduating high school seniors (Schlossberg, 1995). The transition may be difficult for a student, but having coping resources to deploy can provide added assistance. The inclusion of peer mentors help create additional support and strategies and can vary depending on the individual's own situation and sense of self. Students who are first-generation may be entering a highly anticipated transition and be excited to attend college, but without proper adjustment resources the change can be increasingly difficult. Schlossberg (1995) states that the level of success or failure is primarily determined by one's ability to adapt to the new environment. The goal of this study is to increase a student's self-efficacy while creating a supportive culture to make it easier to navigate historically barriers in transition.

Table 1

Schlossberg's coping resources - the 4S's

Coping Resources - The 4 S's			
Situation	**Support**	**Self**	**Strategies**
Event or non-event	Social support	Personal characteristics	Coping responses
Timing	Family	Psychological resources	
Level of control	Network		
Previous experience	Friends		
Role Change			
Concurrent stress			

Schlossberg's coping resources - the 4S's as applied to the transition to college. Adapted from *Counseling Adults in transition; Linking Practice With Theory.* Schlossberg, N. K., Waters, E., B., Goodman, J. (1995). New York, NY: Springer Publishing Company, Inc.

Situation. Various situational examples influence a student transition. The first factor, situation, encompasses the timing, level of perceived control, significance of the role change, causes that initiated the change, perception of the duration of the challenge, experience from a similar situation, and overall view of the circumstances during the transition period. Each student transition can be viewed from each factor and is unique to each student.

The start of a change can make people perceive themselves and their lives in a new way (Schlossberg et al., 1995). Some students may view the transition to college as a role gain or a role loss. Regardless, students will experience a level of stress with the accompanying transition. The more the person experiences a change toward the norms of the new role while in the pre-transition stage, the earlier the individual will feel comfortable in the new environment. High school college preparatory program or college supported "bridge" programs to support students during the summer are

becoming more popular for underrepresented students and have demonstrated success (Kezar, 2000). Castleman (2014) argues that larger, scalable solutions of this type should be explored to encompass larger populations of students.

In addition, concurrent stress can also play a role: other stressors that are unrelated but present in one's life experienced during this pivotal time. A student who needs to relocate to a different geographical area to attend college may reconsider the choice to attend college if a close family member becomes ill. This may also influence the student's level of perceived control and ability to embark on the collegiate journey, which is a significant factor in the transition.

Self. Personal and demographic characteristics (socioeconomic status, gender, and age, stage of life, health, ethnicity) and psychological resources (ego development, outlook, commitment, values) are included in the self. These factors influence the overall transition depending on the individual, as students transition to college from different starting points and stages in development as they navigate the change process. For example, students classified as first in their family to attend college typically face a more challenging transition to college from high school (Smith & Zhang, 2009). People who experience different circumstances can vary in resources and are influenced by different events, which makes individuals approach the identical transition from multiple frames of reference (Schlossberg et al., 1995).

Above all, income is believed to be the most influential predictor for students (Rall, 2016). Students classified as low-income are especially vulnerable to summer melt (Castleman & Page, 2014). Although college enrollment has increased for certain populations in recent years, low-income student enrollment has continuously remained

lower than their wealthier peers; 51% of the wealthiest quartile of 26-year olds have obtained a college degree, compared to only 7% of low-income young adults. (Castleman & Page, 2014). Economic status can be a predictor in educational achievement as students from moderate backgrounds may face an additional strain. The economic advantage for certain students can make their transition to college anticipated and have less of an influence on the family, as leaving the house may have been planned and expected for a significant period of time.

Support. The transition between high school and college creates a gap in professional support for many students. For some, the inability to have easy access to teachers, mentors, and guidance counselors, once high school has concluded, especially during a period when they have not yet developed a stable relationship with their new college can propose a challenge. Castleman (2014) argues that the deficit of quality support during this period may be problematic, especially for first-generation students whose networks may lack experience with the college going process. Low income, first-generation students who may have overcome various barriers to have reached this stage can struggle to reach their collegiate ambitions for this reason (Castleman et al., 2014). In addition to professional support, types of support units to assist individuals in transition include family units, close relationships, friends, and the communities in which people belong. In fact, supportive mothers, teachers, fathers, friends, and academic advisors all collectively serve as guiding factors in a through the transition (Smith & Zhang, 2009).

The network of friends can serve an influential role to support their future ambitions or serve as a barrier, as peer support can negatively influence the student's

final outcome (Smith & Zhang, 2009). Students may not want to leave their home setting because of a perceived loss of family, friends, or relationship support even after formally committing to an institution. A student's perceived need to financially support their family can delay a student from leaving their situation to pursue their college ambitions. Targeted outreach with accurate financial information and or appropriate contacts may be beneficial in certain cases.

Different demographics of students can rely on varying types of support. Kenny and Stryker (1996) found that minority students sought family for social support, while white students tended to rely more on peers. Certain minority groups and disadvantaged students with low GPAs are more likely to utilize high school guidance counselors, academic advisors, or new student orientation programs as valuable resources. Employing additional advisors or guidance counselors as resources has been advocated as a reliable support for this student population (Smith & Zhang, 2009).

Strategies. Successfully navigating the transition to college encompasses aligning knowledge, ambitions, and resources so students receive a guided escort into the next phase of their journey post high school (Arnold et al., 2009). The final factor, strategies, relates to coping actions individuals can take to prevent, relieve, or respond to the stresses associated with the change (Schlossberg et al., 1995).

The period following high school graduation represents a newly acquired sense of freedom that is significantly different from students' previous years of structured schooling (Bozick & DeLuca, 2005). Strategies are part of a student's arsenal to utilize and depend on throughout the change. Resources that students can utilize to navigate the landscape are crucial during this time and can help manage stress, or perceived stress,

that accompanies a change. The person with a larger repertoire of coping responses will be more likely to weather the strains of the change more effectively (Schlossberg et al., 1995). It is also important to note that the more a transition affects the individual's life, the more coping strategies will be required, which influences the period of assimilation or adaptation (Schlossberg et al., 1995). Having a reliable and supportive network to depend on can aid in the students' perceived level of control.

Academic Capital Theory

To complement Schlossberg's transition theory, academic capital theory provides an equitable lens to explain the experiences of students who participate in the study: first-year, first-generation college students transitioning to Chico State. Research has historically focused on what the individual student should do to be successful and largely overlooked the social aspects and academic capital variations in their families and communities. Academic capital is defined as "social processes that build family knowledge of educational and career options and support navigation through educational and professional organizations" (St. John, Hu, & Fisher, p. 22, 2011). The acquisition of academic capital, as well as access to support systems or networks that can expand opportunities, has been limited to many families who do not have college going knowledge. The theory promotes educational opportunities that guide students through educational systems and further expand family educational knowledge (Perna, 2012).

A focus on academic capital encourages the restructuring of the transitional education system to be more proactive, understanding, realistic, and communicative to both underserved students and their families. The majority of students from low income backgrounds who complete high school graduation do not enroll in college, and

intervening early can empower students and parents (St. John, Hu, & Fisher, 2011). The overarching goal of the theory is to prioritize increasing college access, the development and expansion of the student's supportive network to provide timely information during a time of transition, and a commitment to aiding students in the pursuit of their career goals (Perna, 2012).

Unlike Schlossberg's transition theory where student resources and support can vary from students depending on their level of privilege, with academic capital theory we should view the transition to college specifically from the low-income, first-generation student's experience. Academic capital theory assumes that students from this demographic background may be more likely to encounter additional barriers, unlike Schlossberg's theory which would apply a uniform perspective for all student populations. The academic capital theory approaches the transition with a perspective that systemic changes exist and should be addressed, and students should share academic capital gained with their respective communities.

The theory is grounded in the argument that academic capital is transferred from generation to generation. Although first-generation students are lacking in academic capital, systems can be adapted to support the first-generation student population. By educating students and their families on financial resources who may not have been known (i.e. scholarships, grants, work study, on campus jobs), students may be better positioned to focus on success from the onset of the first day of college. In addition, the summer before classes start can be expanded to help students make meaning of the delivery of provided information (Perna, 2012). Through trusted information delivery via viable networks, not solely the student, the student is better informed and supported.

Six constructs connect the theory to the transition to college: easing concerns, networks, trust, information, cultural capital, and habitual patterns, all with the goal to create academic capital and sharing their gained knowledge with their community. Each is further detailed below in relation to opportunity melt. Unless noted otherwise, St. John et al. (2011) is the source for general definitions of terms.

Easing of Concerns

Many families closely examine and create a plan to address the cost of college, but the strain is greater on the financially insecure. Family concerns about college costs can not only constrain college preparation but can also negate college enrollment as St. John et al. (2011) observe. High school students who do not believe that they have the financial resources to afford college are more likely to consider a non-college preparation track. Even students who do persist to college application can be placed at a disadvantage. If parents are concerned about the ability to pay for college they are highly likely to convey these worries to their children, which can affect preparation and persistence. Many colleges have finite deadlines to apply to various forms of financial assistance. Supplying information from the peer mentors who focus on tangible ways to reconcile college costs is of vital importance throughout the interventions.

Supplementing of Networks

First-generation students, especially low income, may not have a network of support that serve a knowledge mentors on the college going process and share their academic capital. In fact, the social networks of low incoming students (peers, elder in community) may doubt the reality of college. These barriers can be overcome by educating established networks, including a focus on encouragement. Parents who are

informed on important transition requirements and advice can provide cultural capital through their influence and advocacy to their children. When parents lack this knowledge counselors, and even peers can be an important course of information delivery and motivation. The peer mentors in this study intent to outreach to assist students in building their network.

Building of Trust

Individuals who are in position of influence can play a critical role in relaying the credibility of choices post graduation. Students may be able to find this trusted entity at their school (teacher, counselor) or at home, but this cannot be assumed. Because of parent experiences in schools, there is a likelihood of trust between low-income families and schools. Outreach services that involve parents can provide them to support students throughout the transition. In addition to parents, mentors from the college can also connect with students early and begin to develop trust. College-intending high school graduates have responded positively to proactive outreach via informative phone calls, or the overall sentiment of engaging and retaining excitement for the upcoming semester (Rall, 2016). Peer mentors will not only be trained to support incoming students and encourage their educational development, but promote engagement from family members to address any outstanding questions or needs.

Providing Access to Information

Students need accurate and timely information during the transition to college. The theory promotes an awareness that students with no prior college experience do not benefit from cross generational college attending experience and encounter barriers from academic preparation, lack of understanding the transition process (financial aid

navigation, important deadlines). Various social environments can undermine the thought that college is accessible and affordable. Difficulty understanding, or even obtaining, necessary information, financial constraints, lack of prior knowledge, and failure to complete required paperwork all contribute to summer melt (Arnold et al., 2009). Encouragement programs have the potential to create trust of information, and provide accurate information.

Building of Cultural Capital

Low-income college intending students encounter a variety of financial, informational, and additional barriers to enrollment (Castleman et al, 2014). Many colleges have numerous steps that need to be completed during the summer period that typically include: formally committing to the University, registering for orientation, completing the housing application, submitting proper financial aid documents, passing placement exams, and submitting remaining admissions paperwork (i.e. official transcripts), among other steps. First-generation students typically are beginning the transition to campus with limited firsthand experience of college success in their families. Not completing even one of these steps can result in rescinding one's admission. Students, especially first-generation students, can struggle with the intake of information because of lack of cultural competency and higher education literacy.

Building of Habitual Patterns

Qualified, first-generation college intending students may be more likely to forgo college, even after admission, based on the challenges discussed in the previous core aspects of the theory. These culminate in habitual patterns. Reinforced patterns within low-income families often revert to a pattern to the workforce from high school without

considering college. Fortunately education in high school can be one factor to assist with a student's future ambition to transition to college. Secondary schools that develop study skills, time management, college navigation, and coping strategies could be beneficial to the transition and their college careers (Smith & Zhang, 2009). These practices can help develop new patterns to support the intake of new knowledge and provide opportunities for overlapping mentorship through the spring and summer months.

Peer mentors are ideal to help implement the theory and execute the practice to the incoming college students. They serve as a strong, influential presence on the development of college students (Astin, 1993; Chickering & Reisser, 1993). An important role of peer mentors is to support less experienced incoming students become acquainted and connected to their new institution, academic related information and out of the class activities (Sanft, Jensen, & McMurray, 2008). In addition, peer mentors can offer a level of consistency in the transition from high school to college by helping new students feel associated to the campus community (Coles, 2011). These components place peer mentors in a position to develop trust, expand networks, and deliver timely information to the new students.

Colleges need to restructure their approach to better support students in various stages of the transition with the delivery of timely communication and relationship-building. The period between accepting admission and enrolling in classes is lacking in support. Many agree that the summer between high school graduation and college matriculation is a critical period for underrepresented students (Arnold et al., 2009). Low-income, first-generation students need not only access to higher education in terms of admissions, but a college or university within which they will be understood and

where they will receive a targeted approach. High school and college collaboration on curriculum design can be key to make a smooth transition to higher education by preparing and beginning the transition before the summer begins, especially disadvantaged students (Smith & Zhang, 2009). Via proactive interventions and fostering of trust to establish an avenue of approachability and communication, we can further stabilize the transition from high school to college. Lastly, the theory encourages students to persist to know only better themselves but apply the acquired knowledge to their community and recreate opportunities for future generations and future students who reside in the community.

In the project described in this dissertation, the theory was put into practice via the training and continuous direction of peer mentor interactions with their respective mentees. Peer mentors conducted their sessions with 3 guiding goals; to provide reminders of timely information of important tasks, aid in developing the mentee's network (connection to applicable student interest clubs, major department contacts, facilitating social events with new/continuing students) and reassuring ability to be successful in college. Further details of the intervention and incorporation of theory into practice are discussed in the following chapter.

Summer Melt Literature

In addition to the theoretical models discussed above, the study was influenced by successful intervention practices to address opportunity melt. Although the research is limited and nearly all of the existing research on summer melt has been conducted in the past 10 years, the current literature on the subject confirms the variety of challenges students face in the transition to higher education and reasons why they do not persist.

Recent intervention studies on summer melt have yielded promising results for low-income college bound students. Proactive summer support in the form of college counseling intervention studies for low income students has shown it can help students persist and substantially increase college enrollment (Castleman et al, 2014). Texting and incorporating artificial intelligence "bots" (Page & Gehlbach, 2017), or calls and emails from the admissions departments throughout the summer (Rall, 2016) can also help students feel engaged and also increase the likelihood that students will enroll in a timely manner. Lastly, developing research indicates that students begin participating in their future college's social media in advance of high school completion and it can be a prominent factor in the social connection to the institution (Castleman & Page, 2014). In my dissertation project, peer mentors were selected as they can play an influence on student development, they are more likely to engage other peers, and easier to maintain a relationship because of relevant on and off campus shared experiences (Astin, 1993, Swenson, Nordstrom, & Hiester, 2008). Peer mentors play a vital role by offering consistency during the transition from high school to college (Coles, 2011). Finally, peer mentors are an accessible resource on campus who have been trained to work with students in transition.

Changing the Local Context

Action research is a cyclical process where previous examination and intervention cycles are used to inform future iterations of the study (Mertler, 2016). Previous cycles of this research included survey outreach to Cal State applicants who had confirmed their enrollment and did not enroll in the fall semester, focus groups with current students who explored challenges of their transition, and interviews with admissions counselors who

receive communication from students and parents once they miss key deadlines during the transition. Previous cycles confirmed that the late spring/early summer months constitutes a time when students begin to encounter challenges with the college transition, it can be a period when incoming students are questioning their decision, and that admitted applicants are exiting the guidance of high school and have not yet secured a trusting and informative relationship with their intended or admitted college. When I interviewed students and professional staff, they concluded that students often face navigational challenges or have preconceived misconceptions of the transition and additional support during this stage is warranted.

The theoretical perspectives, empirical research on transitions to college, and my prior cycles of research support an intervention to address opportunity melt. Until recently most colleges have distributed an equal amount of resources to all incoming student populations during the period of intention to enroll through the summer months, regardless of first-generation status. Students who encountered obstacles would need to traverse common challenges of college payment, finding belonging and community and satisfying a checklist of items (immunizations, registration, housing, books, etc.), often on their own. Students who did not have the same academic capital as more advantaged peers were at a significant disadvantage to navigate the onboarding process with little guidance from the accepting institution. Unfortunately, many colleges have viewed this transitional period as a test for prospective students, and the ones their admissions departments judged as qualified to attend college. In my experience, for many college administrators the ones who did not persist would not be ready for college. Other institutions decided not to devote appropriate supporting resources to combat the attrition

that would habitually occur. Transitional support and proactive interventions did not exist or were rare.

The intervention described in the next chapter sought to provide preemptive support while respecting the individuality of each incoming student and examining their transition through the lens of the fours Ss of Schlossberg's transition theory. Trained peer mentors are well versed not only new student requirements and deadlines, but also how to be sensitive and aware of the uniqueness of each student's current situation. Differences between students from various backgrounds, knowledge of strategies to approach transitional challenges, and existing, or lack of, support was a part of training.

The intervention outreach efforts also applied the academic capital model by supporting students who need it the most, the historically underserved first-generation college students. The peer mentors are present to ease concerns of students throughout the transition phase. Meetings between the current and incoming students are intended to expand knowledge of campus resources and provide overall support for navigation of transition obstacles, a focus on issues which are all part of the core principles of academic capital theory. It also increases their college-going network by pairing the students with current students who have relatability and are trained on the challenges and resources to properly support the college going process. The timely information from a trusted source can serve not only to help the student progress, but also strengthen their ability to succeed in college.

Colleges place a significant effort on recruiting prospective students and retaining matriculated students, but the same effort is not practiced during the intermediary phase during the months after high school graduation and the start of Fall classes. To improve

the retention of college intending students, higher education institutions must take steps to understand the influence of opportunity melt and prioritize support. Many universities view opportunity melt as a natural part of the admission cycle and students lost in the transition, it is often assumed, have either selected a different institution or decided not to attend college for reasons outside of the institution's control. The energy is focused on the students who have persisted through the first few weeks of school. High schools, on the other hand, believe they have done their part by helping students be admitted and confirm plans to enroll in a college. For changes in opportunity melt policy to be implemented secondary schools and colleges must first recognize the issue of opportunity melt and take meaningful, collaborative steps to better understand and support students in the transition.

CHAPTER 3

METHOD

This chapter details the procedures and methods used to provide peer mentor support and targeted strategic outreach to students who are in transition from high school to California State University, Chico. Included in this portion of the study are additional details regarding the study setting, participants, researcher role, intervention details, application of instruments, data collection, data analysis, and potential limitations of the action research intervention. The primary objective of the study was to examine the influence of transitional support of peer mentors assigned to incoming first-year Chico State students shortly after the incoming students confirmed their enrollment to attend the institution through the university census date, September 20, 2021. Following the submission of their intention to enroll at Chico State and interest in participating in the study, new students were paired with their respective peer mentors in June. The pairing occurred prior to key deadlines for admitted students: Orientation registration deadline (June 15), official transcript submission (June 30), orientation attendance (Mid-Jun -early August), and course enrollment and attendance. The pairings also were made prior to the students finalizing financial aid, housing, immunizations records, and math placement assessments (only applicable to certain majors). Twenty-four college-intending students were included in the intervention and met with their trained peer mentor at least every two weeks in an effort to build relationships and help the novice students navigate the transition to college.

The intervention followed the guidelines of an action research study. Mertler (2016) defines action research as a systemic examination in an effort to generate greater

understanding of a local context and improve the practice. It provides local practitioners the opportunity to study and apply intervention methods that are unique to their student population to better understand them and improve the effectiveness or quality of the applied approaches (Mertler, 2016). The practitioner identifies a local, practical and relevant area of focus, collects data to best understand the current process, develops and executes a plan of action in collaboration with key stakeholders to test ideas, followed by critical reflection, and is cyclical in nature (Mertler, 2015).

Action research tends to align with mixed method designs, as they integrate both quantitative and qualitative designs (Creswell, 2005). This action research study applied a mixed method design to holistically examine the influence of peer mentor support. There were 2,220 first-year students who confirmed their enrollment for fall 2021. Out of these first-year students, 590 were participating in support programs (Student Athletes, Educational Opportunity Program, specific college support programs) and were excluded from the study. All remaining prospective students were solicited to participate in the study through a recruitment email.

In addition, to provide a greater understanding of the perceived support from those who experienced the intervention and those who did not, a small portion of students from the following populations participated in a semi-structured interviews: six students who partook in the intervention and enrolled and in the end, a single student who did not participate in the intervention and enrolled in courses. Data collected from the survey was examined concurrently with data from the semi-structured interviews. The analysis from all instruments assisted in addressing the research questions of the study. Students who receive peer mentor support in the summer months leading up to census, as well as

those who are experiencing the same transition but do not have an assigned mentor, were both examined.

As described in the second chapter, my initial cycles of the study found that students who confirmed their enrollment and did not enroll in the fall semester may have had a different experience and outcome if a peer mentor had been assigned to be available to support them in the earlier stages of the transition. There was also the indication that students with targeted support may have been more prepared in the days leading up to the first day of classes.

To answer the research questions, I collected quantitative and qualitative data from retention and enrollment through the transitional stages (intention to enroll, orientation attendance, first day of class attendance, census), with surveys and semi-structured interviews of intervention participants and students who enrolled in the university but did not experience peer mentor support. The qualitative data was analyzed via thematic coding, and because of the small numbers, quantitative data is analyzed in a descriptive fashion.

Throughout the study, data was collected and analyzed to answer the following research questions:

1. What is the influence of a peer mentor assigned to incoming first-year, first-generation Chico State students on retention through the census date of the fall 2021 semester?
2. How do incoming first-year, first-generation Chico State students perceive the increase in academic capital through their experiences with an assigned peer mentor?

3. To what extent do incoming first-year, first-generation Chico State students perceive the support from their assigned peer mentors in successfully navigating all new student requirements (Orientation attendance, securing housing, enrollment, transcript submission, financial aid/fee payment planned, attendance at census date)?

Setting

Chico State University is one of 23 California State Universities. With a population of 16,000 students, the campus is located in rural Northern California. Most students are California residents, and the majority, three quarters, come from outside of the City of Chico and its surrounding communities. Transitioning to college can be challenging, especially with a population that includes many who are first in their family to go to college, as well as unfamiliarity with the Chico State Campus; and 53% of the Chico State students are self-identified first-generation students. Attrition in the summer is significant: each year approximately 16% of all incoming first-year Chico State students who officially declare their intention to enroll are not enrolled at fall census (the 20th day of the semester).

With recent declining enrollment in recent years, the institution is examining ways to not only maintain a healthy admissions pipeline, but encouraging staff to better prepare students for adjustment to college. In addition, the university has recently listed equity, diversity, and inclusion as its first strategic priority. Attrition data over the past four years show that first-generation students are less likely to enroll at Chico State after confirming their intention to enroll at the institution. From 2017 - 2019, From 2017 - 2019, 81.4% of first-generation students who confirmed their intention to enroll actually

enrolled, compared to 88.5% of non-first-generation students during this period of transition.

Participants and Recruitment

All participants were new, incoming first-year first-generation students who confirmed their enrollment and agreed to participate in the research study. The study took a more defined approach to include participants that were more likely to experience opportunity melt as all participants were first-generation students. This study defines the term "opportunity melt" as students who officially submit their intention to enroll at Chico State but are more unlikely to attend any college or university in the fall. A common term, summer melt, is broader and includes overall attrition of students who may be in the process of narrowing down a list of colleges and submit multiple intentions to enroll, or students who decided in the summer months to simply attend a different institution.

In the late spring of 2021, over 1,600 first-year Chico State students who were admitted had submitted their intention to enroll at the university and had not been assigned to a formal support program over the summer. Each of these students were sent an email recruiting them to the study and offered a link to the intake survey. This survey included an embedded consent at the beginning of this initial survey to enable both participation in the intervention (for a sample of respondents who consent) and follow-up data collection regardless of inclusion in the intervention. Items included in the questionnaire addressed student interest in attending higher education, first-generation college student status, and confidence levels of current major and concerns about the college transition. The full questionnaire is listed in Appendix A.

Out of all respondents who were not otherwise excluded (see the next paragraph), 31 students consented, and 24 were selected via random sampling to be a part of the experimental group of the action research study. All consenting participants identified themselves in the first survey as first-year, first-generation students. All 31 students were placed in an excel sheet and randomly assigned a number between 0 and 1. The 24 students with the lowest assigned random number were selected for the mentoring program. Selected students received follow-up communication from their assigned mentor to start the intervention the week of June 21st. Students must have been 18 years of age by May 1, 2021, to partake in the intervention. Those who were a part of a formal support program on campus (Educational Opportunity Program, student athletes, students in the honors program, REACH -Raising Educational Achievement in Collaborative Hubs), and international students were excluded from the study, as these populations had established transitional support.

Participants descriptions in comparison to the overall Chico State student population are listed below. Students from the Southern California, Out of State, and the Sacramento Area were slightly over represented in comparison to the overall student population. While students from the San Francisco Bay, Central California, Chico Service Areas were slightly underrepresented. Table 3 showcases gender in relation to the study and overall student population at Chico State, which was a comparable representation.

Table 2

Participant description – Area of Origin

Area of Origin	**Participant Percentage**	**Overall Chico State Student Percentage**
San Francisco Bay Area	13%	23%
Central California	13%	18%
Chico Service Area	17%	26%
Out of state	4%	2%
Sacramento Area	17%	11%
Southern California	37%	21%

Table 3

Participant description - Gender

	Male	**Female**	**Nonbinary**
Study participants	38%	62%	0%
All Chico State Students	44%	55%	1%

Upon completion of the intervention in September, all participants whether or not assigned a mentor were sent a portion of the Academic Capital Survey (Winkler, 2015), in Appendix B) to compare responses from early summer to the middle of the fall semester. In addition, recorded semi-structured interviews followed for 6 students who

participated in the intervention and agreed to the interview, and in addition, 1 student out of the non-mentored 7 participants who agreed to an interview. This student was not part of a formal support program, and was enrolled in classes for the fall semester.

The original plan for the research study was to recruit at least 20 admitted applicants. I had planned for 60 participants to be assigned a peer mentor, and the remainder in a control group. In that original plan, 10 peer mentors were scheduled to be assigned to 6 students each. Unfortunately, the number of students who were interested in participating in the study within the allotted time frame was lower than anticipated. The original plan was adapted to include 24 students in the experimental group, 4 mentors with 6 students, and 7 in the control group. This lower level of participation changed the analysis; causal inference for RQ1 became unavailable, while the qualitative interviews reached a higher proportion of participants who received mentoring.

Role of the Researcher

For the past year I have been responsible for overseeing the transition of matriculated students to enrollment at Chico State University. Through my department, Orientation and New Student Programs, I manage the onboarding process of all incoming new students with a staff of approximately 40 student leaders and professional staff. Throughout the study my roles included administering the distribution of the intake surveys to the new students and training and supervision of the new peer mentors. Following the collection of the initial consents and surveys, I paired the student leads to the incoming students. The salary for each peer mentor was also derived from the Orientation and New Student Programs budget. Following the execution of the intervention, I served as interviewer and data collector. My professional support team

and I had regular meetings with the student peer mentors, and I made myself available to meet when needed. Finally, I solicited student participation, conducted the individual interviews, collected all data, and coded the interview transcripts as well as made final decisions about themes.

Intervention

Commencing in late spring and progressing throughout the summer months of 2021, the intervention to reduce opportunity melt occurred at California State University, Chico (Chico State). Six undergraduate students were originally selected and trained to assume the role of peer mentor throughout the intervention with a caseload of up to 10 students per mentor. This caseload amount was selected based on previous cycles of research mentorship and an appropriate load of students per mentor. Before the matching began one peer mentor declined to participate in the study and another was unable to fulfill the commitment due to another job. Therefore, four current students took the lead as a mentor. 24 mentees were selected of 31 consenting participants via random sampling as described in the prior section. Matching between mentee and mentor was arranged via geographic hometown and major as a priority where feasible. Four mentees shared the same hometown as their mentor and were paired together. Six other mentees shared the same major with a mentee and thus were partnered. In addition, each peer mentor had previously served as an orientation leader in summer 2020 under my supervision.

Mentors were responsible to spend consistent bi-weekly meetings with their mentees. Although they were trained on helping students in the transition to college at orientation, they received additional training to assist the incoming students during the

duration of the summer. They were trained to emphasize building relationships and trust with their new mentee, to learn about the unique interests' students possess to helped expand their social and academic network, and to provide timely items to inform/remind students, to conduct positive storytelling, and to use general conversations starters with an overall prominence on supporting students throughout the duration of the transition. In addition, with their mentees, peer mentors shared lessons learned from their journey to college, information on applicable tips to make a smooth transition, and demonstrations of how to navigate key electronic resources available to students at Chico State.

The peer mentors were ideal for this supporting role, as it was a continuation of their previous training and experience, they are on the orientation payroll, and they have a relationship with the onboarding program and our expectations. In addition, they were all upperclassmen and were familiar with the challenges and successful strategies for both online and in-person education settings. Peer mentors had 3 guiding goals throughout their interactions that align with academic capital theory.

Timely Information

Peer mentors were guided to provide time sensitive information to ensure students were understanding of crucial tasks, such as submitting financial aid documents, official transcripts, or registration for Orientation or other transition events. A goal of the peer mentors was to contact students prior to each important deadline to ensure they were aware of and knew the process to complete the necessary requirements. Peer mentors were charged to use these timely reminders as a guide to assess how their mentees are navigating the transition. Peer mentors recorded discussion points from their bi-weekly

conversations and had frequent checkups with professional orientation staff to provide support and guidance when needed.

Networks

The intervention was geared to help students expand their network and build community. Peer mentors were trained to inquire and learn about the students' background, likes, and hobbies and introduce them to applicable clubs and organizations that were compatible with their experiences and prospective interests. In addition, the peer mentors hosted virtual network gatherings to meet other students in the experimental group during the summer months. Peer mentors also promoted the benefits of connecting with their academic departments and individual staff member support when applicable.

Reassuring Students' Ability to be Successful in College

Peer mentors were trained to recognize the progress the students have made and encourage them throughout the transition process. Throughout the summer months the peer mentors inquired about the top concerns and questions of the new students and helped guide students through challenges they may encounter. Their goal was to form a relationship where the students can trust the peer mentor and honestly relay questions and support is provided when necessary. Peer mentors share their experiences and be guided to provide sound advice to help them navigate the transition from an experienced student perspective.

Peer mentors made initial contact with their mentees in late June to introduce themselves via email and phone. Following the initial contact, peer mentors delivered timely information reminders, which served as a guide to their interactions with their assigned mentees every other week throughout the summer months. The sample checklist

below (Table 4) served as a starting point for discussions and for the mentors to assess the current state of their mentees. The peer mentors' primary focus was on building relationships with their respective mentees to reassure their success, address their unique concerns, build their network, while reminding students of timely deadlines.

Table 4

Checklist to assess mentee progress

Month	Timely Information Used as Guiding Prompts
May	Orientation registration verification
	Completion of math placement assessment for applicable majors
June	Orientation registration
	Completion of financial aid process
	Submission of official documents (high school/college transcripts, Advanced Placement, International Baccalaureate)
	Orientation attendance
	Fall course enrollment has been reviewed by an advisor
July	Housing location secured for fall
	Deadline to pay for classes (Jul 28)
August	Completion of mandatory tutorials
	Submission of immunization records
	Attendance at first day of classes verification
September	Attendance at census verification

Most importantly, the mentees were informed that the peer mentors were available to answer questions throughout the transition. Participants were also encouraged to contact peer mentors if they were encountering challenges or needed assistance/insight throughout the transition. The checklist served as a guiding template for the mentors to help initiate and guide their conversations.

What the Control Group Received

The control group consisted of 7 student participants. These students received the general level of support that all incoming students receive. They were guided to register for orientation and complete a pre-online orientation program and attend orientation. Similar to all incoming students, they were encouraged to join a social media "Chico State Class of 2025" to be reminded of updated and ways to connect with their classmates throughout the summer. The orientation fee was waived for all new students and they were encouraged to attend, but not required. At the start of school all students received advertising for the "Wildcat Welcome" activities that were designed to help the students become acclimated to the campus.

Instruments and Data Collection

A convergent parallel mixed methods research approach was used to assess the effectiveness of the transitional barriers, perceived support, and influence of the interventions proposed. This mixed methods approach was selected to provide additional data, build on the strengths on multiple forms of data collection, and to better address the research questions (Plano Clark & Creswell, 2015). A convergent mixed methods research follows a set of procedures for researchers to concurrently collect qualitative and quantitative data, and then analyze and compare the data separately, to provide an overall

interpretation study consists of both qualitative and quantitative approaches in the same study (Plano Clark & Creswell, 2015). The Academic Capital Scale survey (Winkler, 2015), institutional retention data, and semi-structured interviews served as key instruments to measure the intervention. The research design was applied to leverage the data obtained in the surveys and retention data to the subsequent semi-structured interviews.

Academic Capital Scale

The Academic Capital Scale (included in Appendix B), which was developed by Dr. Christa Winkler (2015), includes 28 questions based around 8 constructs. Participants responded to questions such as *when I struggle in college I know that I have someone to turn to for help*; *I view people who work at my college as trustworthy sources of information*; and *I am confident that I can overcome any barriers to my success in college*. The subscales were designed for practitioners to examine institutional practices and explore a redesign to better support the institutional needs (Winkler, 2015). For the purpose of this study I selected two constructs, Trustworthy Information and Overcoming Barriers. These specific constructs were included because they aligned closely with the objectives of the study, to investigate the increase in trust in the institution and the students' belief that they could overcome future challenges during their college career. The core goals of the peer mentors during their summer interactions were to provide trusted and timely information from the institution, while maintaining a key focus to develop a trusting relationship with their assigned mentee.

Each of the two constructs comprise a subscale with 6 questions related to the overall construct, and each question provides participants the opportunity to respond on a

6-point Likert scale from strongly disagree to strongly agree. Each subscale of the survey, which has been tested in four-year institutions and been reviewed by peers in the field of higher education, has a Cronbach's alpha ranging from .69 to .85, and the overall survey reliability exceeded typical standards with a Cronbach's alpha of .83 (Winkler, 2015). The Cronbach's alpha was .77 for *Trustworthy Information* and .81 for *Overcoming Barriers*. Participants who completed the May survey were invited to complete it again in fall regardless of which arm of the study I placed them in; 6 of the mentored participants and none of the participants in the control group completed the posttest survey.

The measure for each construct is the mean of all items within the construct, and the original goal was to compare construct means in the pretest and posttest. Because of the small number of participants, the comparison here is descriptive only, with construct means and standard deviations, pretest and posttest for the 6 participants with data on both surveys. All students that completed both pretest and posttest surveys were self-identified first-generation students.

Semi-Structured interviews

At the conclusion of the summer semi-structured individual interviews were conducted with 6 students from the experimental group and 1 student from the control group who enrolled in fall classes at Chico State by census. All students were self-identified firs-generation college students. The semi-structured interview protocol for each student population appears in Appendix C. Three sets of interview questions are listed for each student group who were interviewed: Questions targeted the students' perceived influence of the interventions, experiences increasing their academic capital

throughout the college going process, and recommendations for improvements to similar interventions in the future.

Process Meeting Notes

Throughout the summer, I held regular meetings with the peer mentors. The meetings were designed to check in with the peer mentors, learn about any common challenges or trends, and verify attendance of the incoming students at their bi-weekly meetings. Reports of each meeting were documented to be referenced during the data analysis stage of the intervention, to corroborate if possible what participants said from my records of the intervention. Peer mentors were also asked to include notes of each interaction with the mentees. Notes included the date/time of the interaction, a description of items discussed, and action items the peer mentor recommended the mentee to complete prior to their next meeting. This data was used to triangulate responses from students who are selected for the semi-structured interview.

Table 5 provides a summary of the actions, intervention, and data collection timeline.

Table 5

Timeline of the study

Sequence	**Actions**
March to April 2021	• Recruitment of peer mentors • Peer mentor training
May to June 2021	• Student pre-intervention survey submission • Initial contact
June to September 2021	• Continual contact between peer mentors and

	mentees
September 2021	• Academic capital survey • Student interviews • Evaluate interviews

Data Analysis

Data analysis examined the potential influence of peer mentor intervention on attrition and acquisition of academic capital throughout the summer months. A mixed method approach was chosen to provide additional context. Initially a t-test comparing enrollment between control and intervention groups was planned to be applied to assess enrollment rate differences between the control and experimental groups, as well as to assess contrasts between the groups on the Academic Capital Scale. Because of the low response rate overall, including no survey responses from the control group post intervention, a descriptive statistics method was selected to be applied to the data. Descriptive statistics were suitable because they are ideal to organize and describe data collection characteristics for a small sample size (Salkind & Frey, 2020). This method was applied to examine the values of mean and standard deviations of the participants in the experimental group based on two constructs from the Academic Capital Scale retest and posttest surveys completed, as well as enrollment. Quantitative analysis of the survey results was conducted through SPSS Statistics software.

Quantitative Data Analysis

To address research question number 1 (RQ1), "What is the influence of a peer mentor assigned to incoming first-year, first-generation Chico State students on retention

through the census date of the fall 2021 semester?" enrollment status for students in both the control and experimental groups was gathered and compared. In addition, each individual interview inquired about the influence of a student's assigned peer mentor as a factor in continuing to enroll in the institution during the summer months and start of the semester. Recurring themes were investigated to better understand the influence that peer mentors may have had on the mentees' decision to enroll in fall academic courses.

The Academic Capital Survey results from students who experienced the intervention were compared to incoming students who were not a part of the intervention. Each item provides participants the opportunity to respond on a 6-point Likert scale with the following selected options: strongly disagree, moderately disagree, slightly disagree, slightly agree, moderately agree, and strongly agree, and the construct measures were the unweighted means of the items for each of the included constructs. Participants belonging to the intervention and those that did not partake in the intervention received a copy of the survey. Because of the low number of quantitative responses, an unequal distribution of priority was given to the qualitative data collected in the study. Unequal priority indicates that one mixed methods study component has a greater significance in addressing the purpose of the study (Plano Clark & Creswell, 2015).

Qualitative Analysis

Qualitative data analysis through semi-structured interviews gathered experiences resulting from the interventions and experiences from incoming first-year students who participated and also one student who did not participate in the intervention. A primary goal was to measure the outcome of those who had participated in the intervention as well as better understanding the decision process for students who decided not to enroll at

Chico State after previously confirming their intention to enroll. Interviews focused on understanding the influence of an assigned peer mentor on enrollment and ability to build academic capital. Academic capital in this example refers to the level of comfort to navigate the institution, ability to expand their network through discussions on faculty roles and social meet ups with other students, and delivery of timely information. The data obtained in the interviews was applied to address research question number 2 (RQ2): "How do incoming first-year, first-generation Chico State students perceive the increase in academic capital through their experiences with an assigned peer mentor?"

Qualitative interviews also aided in addressing research question 3 (RQ3): "To what extent do incoming first-year, first-generation Chico State students perceive the support from their assigned peer mentors in successfully navigating all new student requirements (Orientation attendance, securing housing, enrollment, transcript submission, financial aid/fee payment planned, attendance at census date)?" Questions in Appendix C, specifically, "Can you describe a time when the peer mentor provided information that you were not aware of? Did that have any affect on your transition?" assisted in addressing this research question.

The qualitative analysis process initiated with the collection of 7 audio recorded interviews. All interviews began after the conclusion of the specified intervention timeline, the campus census date, which concluded on the 21st of September, and occurred between September 26th and October 6th. 6 students in the experimental group and 1 student who was part of the control group participated in the semi-structured interviews. Interview questions asked of the participants are listed in Appendix C.

Interviews from both participants of the intervention and non-participants helped provide a more holistic understanding of the influence of the intervention. As the university was in the early stages of transition back to campus from the pandemic, the semi-structured interviews were conducted via phone, zoom and in-person. Interviews were recorded on my cellular phone and through the closed caption service Otter.Ai for all interviews. After all interviews were transcribed, recordings were deleted from both platforms. Analysis of the interviews prioritized making meaning of the data collected. Making meaning consisted of an emotional and cognitive process with the goal to review, reflect, interpret and thematize the data collected in regard to the research questions (Saldaña, 2015). Considerable time was spent reading, reviewing, multiple coding applications, and reflection.

The first cycle of coding applied codes to the transcript texts, while the second cycle focused on synthesis, or creating new assemblages of meaning in the data (Saldaña & Omasta, 2018). Inductive coding was conducted via HyperResearch, where all codes were created and tallied. Coding was conducted for one complete interview at a time to limit the influence of the previous responses. In vivo coding was employed at times to best portray the unique language of the participants. Throughout the coding process a reflective journal was maintained to write detailed notes and potential assertions throughout the process.

In the coding process, I assigned 54 different codes in the first cycle of analysis using the semi-structured interviews. Codes were grouped into similar categories and formed larger groups to further develop related phenomena (Spiggle, 1994). I searched for themes that could help address the research questions while noting additional

phenomena that were not proposed by the initial interview questions. More specifically, I looked for responses that related to academic capital, the influence of the peer mentors on persistence and enrollment, and influence on students being knowledgeable and aware of necessary tasks to complete during the transition.

Themes were required to have multiple examples. To maintain consistency with the coding, I was the sole person that coded the interview responses. After my first round of coding I selected code landscaping as the transitional process to apply to the data. Code landscaping combines all text to provide a visual representation of the frequency of language used in the data (Saldaña, 2021). Frequently used words, such as "thank you" and "yes" were omitted. The word "helpful" was the most stressed word and connected to the results of the thematic coding.

Theoretical coding systematically integrates all categories and concepts around a central core category that proposes a theoretical explanation for the phenomenon (Corbin & Strauss, 2015). Data was reviewed for overlapping or similar meaning and new, applicable themes. Duplicate themes were eliminated and condensing of categories continued. When examining the codes established to develop themes, I was looking for patterns, or frequent occurrences in the data that appear more than twice (Saldaña, 2021). Saturation arrived when no additional information emerged from the coding (Strauss & Corbin, 1998).

In addition, I applied simultaneous coding to the data—i.e., text segments could have multiple codes attached in the first cycle. This method was selected because it applied two or more codes that are different to a single data qualitative data point (Saldaña, 2021) and I found this relevant and applicable as I completed my first round of

coding. At times there were multiple codes, albeit different, that could be applied to a single statement from the student participants. During the second application, simultaneous coding, additional data points lead to increased data and analysis. The purpose of categorizing the codes was to identify a variety of codes that belong to certain larger groups and to sort the codes to define attributes, compare groups, and condense the complexity of the collected data (Saldaña, 2021).

Following the completion of the interviews and codes created, I conducted member checks with all participants via email for additional verification. A summarized list of findings was sent to each participant via email. I inquired if the mentees felt these findings were compatible with their experiences throughout the intervention and if there were additional insights that they felt were not represented. There were no substantive additional findings or information conveyed from the mentees during the member check.

In addition to member checking of student participant responses, I also engaged in stakeholder feedback. I met individually with each mentor to verify that the findings described were consistent with their observations of the mentees and to confirm accuracy in the data developed. This process allowed me to consult with participants regarding the finding and to further validate themes developed (Saldaña, 2015). Member checking was an opportunity for interviewees to verify the accuracy of their statements and further expand their responses. Mentors confirmed mentee feedback. They shared how many times they shared information to not only the student, but the parent/supporter as well, which is a key tenet of academic capital theory. Parents were often informed via the student or communicated questions to the mentee. The mentors also relayed how they spent considerable time explaining information post orientation, such as the purpose of a

syllabus, purchasing course books, ID cards, applying to on-campus jobs, and sharing the frequency of communication via direct messages on social media.

Limitations

The study encountered a number of limitations, especially as it was influenced by the continuing impacts of the COVID-19 virus. First, the number of students who experienced the intervention (n=24) is a small sample size in comparison with the total population of incoming first year students. The sample of students who participated may have also limited that amount of student diversity and may not be fully representative. The sample does not truly reflect the large representation in the incoming class and therefore should be considered when generalizing the results to a larger population. It is also challenging to make larger inferences on variability of the populations was limited.

There may also be challenges that influence the transferability of the research. Higher education institutions have different onboarding structures that may not be compatible with supporting students throughout the summer months, especially the financial resource investment for students who may not yet have officially enrolled in courses at the institution. Institutions' onboarding programs may also be highly occupied with needs from students attending Orientation, and general questions from the student body and may not have the staffing to support this type of mentoring support at any scale level. The intervention closely followed Chico State's onboarding process and it may not be applicable to institutions that practice different new student support models with various populations of students. For example, some programs may mandate orientation, which Chico State does not.

An added challenge is the potential of a power differential as students may have viewed the researcher and describe their experiences based on what I may want to hear. It may have also altered responses from the participants if they are aware that I was the supervisor of their peer mentor and their responses may reflect poorly or positively on the person they have been working with for the past few months. Another limitation may reside in the self-reported data of student experiences, which may not always be accurate.

Finally, this study occurred during a global pandemic. Students may have been more or less receptive to the intervention, or may have decided to alter their college plans, or be more likely to have confirmed them because of the status of COVID-19. They may also have decided to change their fall plans based on changing plans of the university to offer more/less classes in-person. Since Chico State is viewed as a residential campus, if students believed they were not going to obtain this experience in the near term could have influenced their ability to seek an alternative institution, which may not have been applicable in prior years. There is also a degree of selection bias. Students were emailed the recruitment attempt, and only those who opened the recruitment email, read it the full content, and completed the consent and first survey were selected to participate.

CHAPTER 4

DATA ANALYSIS AND RESULTS

The purpose of the study was to examine the influence on peer mentoring on first-year students on retention, increased academic capital, and perceived support in navigating the transition to Chico State. The study also investigated practices to increase the effectiveness of future cycles of a peer mentoring intervention with incoming first-year college students by employing a mixed methods research design that was composed of a pretest and posttest of the academic capital scale instrument and seven semi-structured interviews. In this chapter I demonstrate how the mixed methods data analysis were conducted and describe findings, focusing on those related to the research question but also adding one unexpected finding related to the institutional context for mentor programs. The chapter organizes the analysis in relation to each individual research question. As listed in previous chapters, research questions consisted of the following three questions:

1. What is the influence of a peer mentor assigned to incoming first-year, first-generation Chico State students on retention through the census date of the fall 2021 semester?
2. How do incoming first-year, first-generation Chico State students perceive the increase in academic capital through their experiences with an assigned peer mentor?
3. To what extent do incoming first-year, first-generation Chico State students perceive the support from their assigned peer mentors in successfully navigating all new student requirements (Orientation attendance, securing housing,

enrollment, transcript submission, financial aid/fee payment planned, attendance at census date)?

The data analyzed in the study examines the experiences of students who were paired and not paired with a peer mentor from the intention to enroll stage through the fourth week of school. Quantitative data collection consisted of the academic capital scale for six participants who had access to peer mentors, as well as overall enrollment data for all participants, while the qualitative data collection included seven interviews that were conducted following the intervention for both the experimental and control groups. Data sources to build my assertions consisted of interviews with new students who experienced the intervention and one student who experienced the transition without an assigned mentor, and the quantitative survey analysis.

Results for Mixed Methods Data

The following section lists each research question individually followed by the results of the study. The first research question examined the influence of peer mentoring on retention through the start of the 4th week of the semester. Research question two examined the perceived increase in academic capital through their interactions with their mentee, while the final research question investigated the influence of support received to navigate new student requirements.

Through qualitative interviews and enrollment verification, the question sought to better understand if the mentees questioned their decision to persist at the institution after they had confirmed their intention to enroll, and if the mentors played a role. The time period that was investigated began once the mentors were paired with their mentees in June, and concluded on the 20th day of classes.

Research Question 1

Research question one examined the influence of a peer mentor assigned to incoming first-year, first-generation Chico State students on retention through the census date of the fall 2021 semester. At census, the 20th day of instruction, all but one of the 24 students in the mentored-participant group were enrolled in their classes. The one student that decided to not continue with her degree at Chico State had significant extenuating circumstance and made the decision to attend a community college and be closer with her family. The mentee had multiple conversations with her mentor and decided that this was her best option for herself and family. All students that were part of the control group were also enrolled on this date. Therefore, out of the 31 students that agreed to partake in the study, only 1 was not enrolled by the census date.

Importantly, mentees were planning to enroll and remain enrolled. Peer interviews were conducted with 7 students and common themes were established based on their experience during the intervention. Peer mentors had been paired with their assigned students after they confirmed their intention to enroll at the institution. Many participants had already registered to attend Orientation, which is one of the key indicators that students will be present during census, before their first interaction with their peer mentor. Through the interviews, mentored participants stated that they had already made a firm decision to attend Chico State before they were paired with their peer mentor. Some mentees did not have their first interaction with their mentor until late in June, which may have also provided a shorter window of influence as most students may have already confirmed their decision to attend Chico State.

Although the intervention may not have influenced short term enrollment, it may have aided in longer term retention. Historically, students do not have continuous support after Orientation through the first day of courses. Students may persist through census but may not have the resources to continue to their second semester. This was evident where mentored students had questions that arose where they needed to adjust their course schedule, even after it had been reviewed by a professional advisor, or were introduced to a resource that may have helped them feel more connected to the campus community. These seemingly small interventions could prove to make a larger future impact on an individual student retention.

The transition to college can be challenging, especially with the added challenge of navigating the transition during the Covid-19 pandemic. Mentees disclosed that the interactions with mentors helped reassure them that they were making a good decision to attend Chico State. The encouragement carried weight because it was coming from a current student who was succeeding in college. Mentors and mentees formed connections with their mentees and provided continuous encouragement along the way through the date of census. Mentees described that it was helpful to have a personal contact to answer their specific questions, make them feel comfortable with their journey, and provide consistent support during the months in a transition when support is not often provided. In addition to encouragement, the mentors prioritized learning individually about each mentee, with the goal of understanding their unique needs and informing them of applicable resources.

One example of such support is where mentors helped connect incoming students to applicable resources. After a few weeks on campus the mentees began to encounter

common challenges, such as homesickness. Over 70% of students are from outside of the local area. The mentees 1, 4, and 5 described in detail how they were guided by their mentor to applicable resources that helped them persist through the initial struggles of the first weeks of college. Mental health counseling services were frequently stated by the mentees as a service that they were made aware of and utilized. Mentee 5 described how her mentor recommended counseling services because she was struggling with homesickness. She was from the Los Angeles area and was finding the adaptation to college, and the City of Chico, challenging. After the recommendation, mentee 5 described here experience contacting the Counseling Center and meeting with a mental health professional.

Mentee 5: "Yeah, they helped me a lot. They made me realize like, yeah I'm gonna miss my family like either right now but like I like needed to understand that the reason why I'm doing college is because of my family, and they made me realize like yeah I'll get to see them, but I also have to be a college student as well."

This particular mentee stated that she was not aware of the Counseling Center resource, although it is briefly covered during Orientation, and connecting her to needed support may have increased retention. In addition to the Counseling Center, the Accessibility Resource Center was named by another mentee as playing a large influence in support during her transition. Through a conversation with her mentee she disclosed that she may have had attention deficit hyperactivity disorder **(**ADHD) in high school but was not diagnosed. The mentee referred her to the Accessibility Resource Center and she was provided with additional support.

In addition to these specific resources, mentees stated that through their mentor they learned a variety of campus resources, met new people, learned how to traverse the campus, received timely information, and received general advice, such as recommended places to study. One mentee pointed out how he continued to utilize a specific location in the library based the recommendation from their mentee throughout the first few weeks of the semester. He noted that he was aware that the library was available to study, but did not know if it was common to study or that a quiet floor existed. All of the information combined may have led to immediate or long-term retention. Therefore, the mentors served as connectors to mentees, connecting them to resources that may have led to retention.

Understanding resources available can be vital for proper support and retention. Mentors not only informed mentees of the resources available, coached them through the process to contact the department, and encouraged contacting the department during the summer months, before the start of class rush. As overwhelming it can be to traverse a new environment, mentees had a point of contact to not only ask questions on what was available, but someone trained to inform and connect them to resources they may not have known existed.

Research Question 2

Six themes emerged through mixed methods data collection and analysis to address research question number two. Through the intervention, there were multiple examples of mentees becoming more familiar with academic resources available and expanding their level of social support and engagement. Mentors played a role in easing the concerns of new students through their meetings that continued throughout the

summer months and the start of school. Each theme is listed in greater depth below, and then I analyze the descriptive data from the Academic Capital Survey.

Mentors Directly Provided Academic Resources and Support

The mentors served as a bridge to expand the social and academic network of students throughout the transition to college. Following the interviews with the mentees, nearly all mentioned that they became more acquainted and confident in key academic resources that assisted in their future success, such as increasing comfort and understanding of the student learning portal Blackboard, Student Center tools, course tutoring availability, and their vital degree progress report that monitors their progress to degree.

Although students were introduced to most of these resources during their respective Orientation session, a frequent comment from the mentees was an additional confidence and knowledge to navigate these key academic resources because of the interactions with their mentor. The mentees were trained to describe these tools and information with great depth. Two separate mentees keenly disclosed that they understood the process to locate the advanced placement transfer evaluations in their Student Center and its interpretation, which many students do not know how to locate this information until later in their college careers.

Mentors also helped students navigate course academic pathways in the months following Orientation. When mentees were struggling to modify or even retain their course schedule, mentors provided necessary support. Several mentees mentioned having their peer mentors, who were all trained on the basics of academic advising, verify their course schedule. Two peer mentors assisted students in the process of navigating a

change of major, one major that required completion of additional math placement assessments for their new major.

Mentee 3: “I was considering dropping a class, and I didn't know how to do that. And I asked her how and she told me the steps … but to meet with the professors first before doing that. I did end up dropping it. And then, I needed tutoring right for bio, and she helped me sign up for it. I never got any feedback from my class until, like, she told me what to do. And then I got it and now I have a schedule that shows me when I’m going to see tutoring.” After the summer Orientation event, there is no consistent process to support students that are interested in changing their major and do not initiate contact.

Academic clubs are a valued resource for students to develop greater relationships with their campus faculty and meet students in their majors in social settings. Mentee 5 referenced how her mentor introduced her to the concept of a major club and supported enrolling in courses. Mentee 5: “Some of the resources that she gave me, it was like a club, because my major is biochemistry and it was like, something about joining a club for that specific major. She was also really helpful when I was getting my classes ready. She talked me through getting books, the Blackboard thing. She told me what would be good for me to do and what I shouldn't do.” Nearly all participants that were paired with a mentor joined a club or organization.

The mentors were trained to increase the mentees’ ability to overcome barriers, even though a significant increase was not reported from the mentees. The mentors were trained to not solely provide solutions to the mentees when a challenge was initially discussed, but to first encourage the mentees to consider resources they had available, either recently learned or through their past history, to apply to the situation. For

example, mentors commonly asked mentees if they had overcome a challenge during a transition to a new environment and what resources/skills were used to be successful. Mentors commonly referred to their experiences in high school or entering their new high school environment immediately after junior high school.

Mentors Expanded Mentees' Social Networks

A common theme across nearly all mentees was enhancing their social network through campus engagement. All mentees had lived at least 45 minutes outside of the Chico area. Although a few knew other incoming students from their high school who were also starting their college career at Chico State, most had small Chico State social circles at the start of the intervention. All mentees either joined a club or organization based upon the recommendation of their peer mentor, or were made aware of them from their peer mentor and were planning to join. Mentees stated how they became aware of new clubs, campus organizations, first-year leadership opportunities/groups, through their interactions with their assigned peer mentor. Mentors were trained to engage in active listening to provide individual recommendations based upon their previous student involvement in high school, cultural and sexual orientation affiliations, and guided students to applicable campus networks.

Educational opportunities such as a campus tour hosted and arranged by the mentor aided new students meeting new and current students. Mentees were invited by their mentor to a mentor-led campus tour conducted immediately prior to the start of the first day of classes, and many attended. They not only became more familiar with the campus landscape, but expanded their social network by meeting current students on

campus. Mentee 1 described how she has talked with the students her mentor introduced to her on the tour at the start of the semester.

Mentee 1: "We did a tour. Like a campus tour, kinda like, to see where our classes were. And during that experience, I met a couple of her, like, coworkers as well. And so she told me that at least I have some more people to talk to at the college. When I start school, or if I see them, I can say hi to them and ask them questions of just talk to them. They seemed cool too.

Another participant who was paired with a separate mentor noted that he felt more confident to navigate the social landscape of college to meet other students because of the guidance received from his peer mentor. Through the interactions and guidance from the mentors the mentee felt more self-assured of college norms and how to meet others.

> Mentee 4: "What I think was one of the most important things for me was it was more so advice that allowed me to make friends, more confidently."
>
> Interviewer: "Can you elaborate on that?"
>
> Mentee 4: "Because of my (peer mentor) I felt I knew where to go, where to meet others. More about what college was about and felt more confident doing so…I don't think I would have thought about joining a club if it weren't for (peer mentor)."

Even the mentees that did not officially join a club or organization reported a stronger likelihood to join clubs, something that they were not planning on doing prior to their experiences with their peer mentor. For some, the level of trust was developed between the mentor and mentee that even marginalized identities were shared and support resources and campus engagement connections were discussed.

Mentors Provided Increased Time to Clarify and Reinforce Campus Resource Information

Incoming students received limited formal information during the summer months, outside of their Orientation session. The traditional Orientation structure consists of a one-day session, with a significant amount of information. Cognitive overload can arrive quickly for a new student entering a new environment with a larger group of students. Unless students specifically ask questions and seek out resources, it can be challenging to understand how to access resources, or that they exist. Students may also be susceptible to forgetting the information provided during the long summer months.

The benefit of being paired with a mentee over the summer months, and not just Orientation, is that they have increased time over an expanded duration of time to further explain relevant resource introduced at Orientation, reinforce important task items, or simply be available to field questions. During this period mentors reminded the students of important deadlines (fee payment, mandatory educational tutorials, immunization record submission), helped them review their fall course schedules, provided refreshers on navigating their student portal, parent and supporter resources, and gave general advice (options to purchase textbooks, additional context on joining clubs, being a successful college student).

Some mentees realized the benefit of having an assigned mentee to clarify and elaborate compared to their peers. Mentee 6: “I have more information coming from (my peer mentor)….like, the way people were telling me things, it was basically the same thing that she told me but she told me, like first, and, like, explained it way better than

anybody else. Actually, she genuinely took the time to like, explain to me and have a conversation about it and I haven't come across people who generally take the time to like, explain it." This can serve as an important time to reinforce or clarify information provided at Orientation, develop greater knowledge about the resources provided on the resources provided, or even further address the individual needs of the mentees.

During the interviews, mentees mentioned feeling further comfort with an understanding of the following resources from their meetings with their mentor: Health Center, Counseling Center, Accessibility Resource Center, tutoring and academic advising resources, campus engagement opportunities, and physical locations of many resources. Mentees were aware of some campus resources outside of their meetings with their mentees, but they were often informed of additional resources for the first time during the interactions with their mentors, especially ones that were more specific and tailored to them.

Mentee 5 was informed about the Counseling Center outside of her mentor interactions but felt she was lacking specific information to engage in the resource. "Um, I knew about it because when I went to webinars and everything they told us about the counseling resource, but I didn't know there was specific help from them, that they can help you until she really told me that."

Two campus resources referenced frequently by the mentees were the Wildcat Food Pantry and Counseling Center. "Mentor 1 states, "I didn't know anything about the Food Pantry until she (peer mentor) mentioned it to me, like, a couple times. And it helps me, like, save money for my groceries. Also, with the club thing. She told me about a couple of clubs which she recommended and then she also kind of showed me how to

make a new club, if I wanted to do that. She (peer mentor) also showed me about FLO (First-Year Leadership Opportunity) ... And she recommended me to do it. Because she told me that she didn't do it her freshman year she recommended me doing it. And now I'm really interested in joining it because of her." General advice on where to study, how to balance one's schedule were all shared by the mentees. Some mentees referenced how to drop a class, to getting a job on campus to tutoring.

In contrast, the student interviewee in the control group stated how there were resources that she was not aware of until well after she started her classes, such as the food pantry and library. She mentioned that she just happened to "figure it out" that these resources existed, mostly through friends or her Resident Assistant. There was a sharp difference between the control group student and the participants of the intervention in regard to the level of information obtained. The control group participant was told that some resources existed, such as the food pantry, but she did not know how to access it, the location, or additional basic information to take the step to utilize the resource. She had a similar experience with her computer. Her personal laptop was getting worked on and she did not have a computer. She was using her phone, until a friend, after a week, informed her that she could rent a laptop from the library.

In addition, students are usually initially informed about campus resources during Orientation, but because of Covid protocol, Orientation occurred online and was not as extensive as the historic version of Orientation. Various webinars were offered in the summer months with little attendance. Therefore, many mentors disclosed that they were informed about basic campus resources not at Orientation, but via their mentor instead.

Orientation has historically been a one-day event. Students had 8 hours to learn about academic requirements, campus resources, meet other incoming students and their major department, and register for courses. The intervention allowed the student to be further informed about vital campus resources because time was not a limiting factor. Mentees were guided to go further in-depth on topics that the Orientation program did not have the time. Mentors could describe the plethora of clubs available, not just the advice to get involved. They could have their mentees practice their degree planning tool, which is only experienced at Orientation. These were both common themes that the mentees relayed as feeling informed and comfortable.

Mentors Helped Ease Concerns in the Transition

Another core concept of academic capital theory is assisting students to ease their concerns during the transition. Several mentees said that having someone available during the transition made them feel more at ease and less nervous, especially when questions arose. More specifically, multiple mentees said that having a specific person to contact with questions, or one who was simply present, was useful when they were worried if they were on the right track. Mentees had concerns about affording college, getting jobs on campus, understanding a syllabus, how to access their electronic courses, and classroom locations. A few mentees mentioned that they struggled to understand if the course they enrolled was in-person or virtual, until the mentors explained.

Mentees had frequently contacted their mentors with questions throughout the summer. Mentee 4 and 6 both described how they found their mentor helpful and often reached out to them, even outside of their assigned meeting times. Both used the term "helpful" and "supportive" to describe their interactions. Mentee 4 stated that she

"reached out to her multiple times about stuff that is going on, like, what resources where I can go. It feels like I have, like a, not a support system, but just like someone where, if I have a question I can go But yeah, basically a big sister that I know has a wealth of knowledge, like to me, accessible... Just being the wealth of knowledge, she is. It just makes me feel a lot better like having, having that, that like, Oh, if I have a question or concern, if I have a burning question that I can't get answers to from XYZ I can ask her, or I can ask her what she did as a reference to myself... I've had a lot of problems at Chico State, but just, things that have happened here, like, an example would be my roommate situation on switching rooms and it was just nice to be able to have someone to talk to about it confidentially, that like can kind of direct me."

Some mentees were questioning their choice of major after Orientation. Mentors guided two of the mentees in this role to utilize resources belonging to the Career Center, such as the FOCUS 2 self-inventory activity that provides major options based on self-selected responses, and instructions on how to reach the applicable academic department for additional information.

These experiences stand in contrast to the student that was part of the control group that was not paired with a mentor, who expressed fear and anxiety during the transition. Mentee 1: "There was a lot of fear because I was like, I thought I was ready for college but at the same time it's like something new that I've never done before."

Interviewer: "Would having a peer mentor been influential during your transition?"

Student Interview 1: "I think so, yes."

Interviewer: "How so? Can you elaborate?"

Student Interview 1: “Honestly that would be really helpful. It's nice to have someone who's older who's like, experienced stuff to tell me the ropes. Was this like okay, don't do this, or yeah do this. Or like if I'm having doubts about something they could kind of run me through what could possibly happen with, like, class changes course we're doing homework, all that type of stuff and it's really helpful. I think it's just the uncertainty and being able to talk with someone that's already been through something. I don't know. It’s like if someone was getting their first flu shot it probably seems scary because it's a big pokey needle, but like if someone walked me through what it was like it would probably be less scary.”

Interviewer: “Less scary?”

Student Interview 1: “Yes, because I think humans are like really afraid of change, and being able to talk to another human that experienced the change we're about to go through, makes us feel like less alone, and less isolated and reminds us that there's like ways we can reach out to others, to communicate how we're feeling.”

In addition, academic capital theory also promotes the inclusion of the family in the learning process. Two mentees informed me how their mothers, would, at times, either join the conversation, or ask their child to inquire about information when their student met with their mentor. Other mentors noted how their students had written down questions to ask them that were directly from their parent or guardian. The peer mentors were not only informing their mentees, but their families and supporters.

The Peer Mentors had Extended Influence

The peer mentors' influence included friends, classmates and associates of mentees. Although mentors rarely interacted with other students who were not mentees, multiple mentees discussed how they shared their experiences and lessons learned via the mentoring interactions to inform their fellow peers. Since peers are in frequent contact with one another it can be easy to ask questions of friends before seeking formal support. It is not uncommon for students who do not have a specific person at the university to seek friend support. Although the program was designed to pair experienced students with a select group of incoming students, the advice and information provided to their mentees extended to students outside of this immediate sphere. Mentees described sharing information learned to their peers not in the program.

While Mentee 1 was relocating from her Southern California town to an apartment complex close to campus, the mentee had a roommate from the same hometown who was also beginning her first year at Chico State. By happenstance, the mentor assigned was living in the same apartment complex that the mentee was about to reside. The mentor provided information regarding the complex, size of rooms, and safety precautions. Mentee one described the support received: "I moved to Chico in, like, the beginning of August. I moved into (x apt complex), which was the same one as (peer mentor). So she told me all about it. What it was like, where to go and stuff. That was helpful. My roommate and I know each other from way back, but she was new to Chico too, so she was helpful with that for both of us."

Mentee 4 shared a similar experience once he arrived on campus and his meetings continued via zoom with his mentor. "My peer mentor not only cared about me, but when I zoomed in my room, the day after I moved in all my roommates were there, and

she wanted to know a little bit about them, get to know them. It was cool to see, like, how, how much she cared about, like, not only just like my experience but also that she made sure that everyone was having a good experience and shared advice and answered questions."

In addition to the mentees sharing information directly to friends or roommates of the mentees, Mentee 1, 3 and 4 all said that they shared information provided to them from their mentor to their friends and classmates. Frequent topics shared were words of advice to start the semester, general questions clarified through discussions with their mentor, and how to navigate academic tools, and locations of applicable campus resources.

Mentors Encouraged Greater Student Engagement

Mentees frequently followed through on advice from their mentors, especially with campus engagement. Campus engagement can lead to greater retention, sense of belonging, and contribute to key aspects of the academic capital theory; expanding networks, easing concerns, and building overall capital. The mentors were advised to stress initial involvement because of the inherent benefits. Mentees stated that they joined a variety of clubs and participated in activities largely because of the recommendation and encouragement of their peer mentors. Although most participants stated that they were aware of campus involvement and the benefits of joining a club, none had joined a club until the interactions with their mentors. Mentees were often made aware of informational items, such as the opportunity to become involved in a campus organization or follow up with an applicable resource before or during Orientation from an entity outside of their mentors. Through the interactions with their

assigned mentors most students needed a nudge to take the next steps to become more involved. And participants joined a diverse array of campus clubs and organizations and first-year student leadership groups.

Mentee 1 was aware that she could join clubs but did not act upon it until the peer mentor encouraged her and provided the student with additional information. Although she was aware of campus clubs and organizations, and had disclosed that she knew the process to join them, she did not initiate action to take the step to get involved. Mentee 7: Yeah I do know how to do that (join a club), and I actually really want to, but it's just this first semester has been crazy for me so I've just decided to wait until the next semester so I can get my feet underneath me." A common misconception for new students is to wait until after their first semester to become engaged and this was not present for new mentees and this was a clear difference between mentees that were assigned a mentor and those that did not have this added resource.

In addition, mentees reported visiting campus resources, such as the campus food pantry, because of the recommendation from their mentee. Mentees spent considerable time learning about the unique needs of their mentees and recommending applicable resources. A few mentees visited a campus mental health counselor because their mentors recommended the support. Mentee 3 disclosed that she thought she had ADHD and was a reason for her past academic struggles, "I mentioned that I think I have ADHD. I had trouble focusing in high school. She recommended a place to go… she walked me through the process on how to get assistance and I went."

Mentees commonly reached out to staff outside of their scheduled meeting and via a text or a direct message via social media. The nature of this relationship was

valuable during the months-long periods when students may not have had a scheduled meeting with a campus representative (post orientation and prior classes starting) and needed support. When mentees encountered challenges or needed support, they felt they had a trusted source that could support them. Some mentees even disclosed their marginalized identities to their mentors in an effort to find students to connect with and share their experiences.

Mentees used common adjectives, such as comfortable, easy to open up to and approachable. Mentee 1 described her mentor as making her feel very comfortable and confident in the information delivered by her mentee. She listed multiple examples of contacting her major department to joining a study group based information supplied by her mentee. And the level of trust was projected not only to the mentee, but the institution. Mentee 2 stated, "The way they were open and caring that Chico was being with them for their students. I think that's where, like, when you're, like, okay, they actually care for their students and they want you to succeed." Other mentees also connected the individual support from their peer mentor as support not only from the specific mentor, but also the institution. This level of trust developed assisted in the process to further engage in the campus community.

Results of Academic Capital Survey

To examine students' belief in overcoming barriers and trust in the institution, I used descriptive statistics to measure participant responses to the Academic Capital Scale (Winkler, 2015) at both pretest and posttest times (May or June for pretest, September for posttest). The scale measured participant responses to statements on a 1-5 scale with 1 =

Strongly Disagree and 5 = Strongly Agree. The mean, range, and standard variation were all included in the descriptive statistics in Table 6.

The selected design afforded me the opportunity to examine pretest and posttest results for the experimental group. The pretest-post-test extracted from the Academic Capital Scale (Winkler, 2015) included two separate constructs: Trustworthy Information, and Overcoming Barriers. This replicated Winkler's scale and for the first construct sought to examine the level of trust in information delivered to the student regarding college from their family and friends and if students trusted their college. In the second construct, the scale was designed to assess how students' ability to overcome barriers to be successful in college. Specific items and constructs are listed in Appendix B.

Of the 21 students in the experimental group, 6 participants completed the pre-test and posttest. Although 6 students in the control group completed the pre-test, no students in the control group completed the post-test. Therefore, analysis of the pretest and posttest was restricted to the 6 students who completed the scale both times. Quantitative study portion results are displayed in Table 6 below. The pretest and posttest (n = 6) are presented below with the means and standard deviations by construct.

Table 6

Academic Capital Scale measurement pre & post intervention.

Constructs	**Pretest Survey N = 6**		**Posttest Survey N = 6**	
	M	*SD*	*M*	*SD*

Trustworthy Information	4.2	0.7	4.4	0.6
Overcoming Barriers	4.5	0.6	4.6	0.5

There were minimal increases on both constructs; Trustworthy Information (0.2 gain) and Overcoming Barriers (0.1). Participants, by a small degree, tended to gain a stronger level of trust with the institution during there summer months, and slightly increased their belief to overcome future challenges. However, most students did not notably change their responses before or after the intervention. Conclusions based on the quantitative data results should be used with caution. In addition to the small sample, the low response rate from both the treatment and control groups makes it challenging to draw strong conclusions on the influence of the intervention. Since no students in the control group completed the follow up study, the meaning of the findings are limited.

Research Question 3

Three themes emerged from the data collection and analysis to address research question three. The question sought to identify to what extent do incoming first-year, first-generation Chico State students perceive the support from their assigned peer mentors in successfully navigating all new student requirements (Orientation attendance, securing housing, enrollment, transcript submission, financial aid/fee payment planned, attendance at census date). It was apparent that mentees needed limited support navigating certain tasks, while others required more direction, education and assistance.

Mentees were often called upon to assist and were often informing mentees of important and timely information. The themes are further detailed in the paragraphs below.

Mentees Felt Varying Degrees of Support, Depending on the Specific Task

Through debriefing interviews, mentees relayed that mentors have limited influence on some of the required task to matriculate. This may have been due to mentees being paired with their assigned mentor later in the transition cycle, in June, than initially anticipated. For example, nearly all mentees had registered to attend Orientation before the pairing with their mentor. Two others were planning on registering for an Orientation session and stated that they would have registered, and attended, without direction from their assigned mentor.

Most mentees informed me that they understood the nature of transcript submission and submission of the transcript did not depend on interactions with their mentor. Although all participants informed me that they submitted their transcript request (high school/Advanced Placement scores), none disclosed that they had challenges and needed additional support. All mentees relayed that they had secured a residence for the fall prior to pairing. On the basis of these answers, I conclude mentees had minimal influence on these important checklist items, primarily because of the timing of the initial pairing.

Most enrollees had their assigned peer mentor as their orientation leader during their Orientation session. Orientation leaders are charged with introducing academic requirements and supporting students during the registration process. Although they are not trained to the level of a professional academic advisor, they are able to assist with general education enrollment and troubleshooting many course registration challenges.

Participants stated that their orientation leader was helpful informing them which classes to enroll and the process to register. Mentees also shared two instances where they needed support modifying their class schedule post Orientation and the mentors were available to provide guidance with initial triage. There were occasions when they recommended the change and showed students the process, did not recommend the change, or recommended they speak with a professional advisor.

In addition, although all participants stated that they were planning on continuing their enrollment post Orientation and being present for census without mentor support, mentors clearly played a role in easing that transition. Mentors supported mentees frequently with transition issues related to homesickness, roommate conflicts, and general preparation (where to locate classes, purchase books, engaging in the campus community). 23 of the 24 mentees were enrolled in courses at the census date. This support could have an influence on continued enrollment at census and beyond.

Patterns of Peer Mentor Use

Most mentees took advantage of the peer mentor support throughout the summer, particularly assistance/clarification in completing checklist items and general questions during the post Orientation timeframe. A common theme was that mentees would ask questions and mentors would provide direction. Orientation was often the initial introduction to campus resources, advising information, campus contact information, etc, but the incoming students frequently requested additional support post-Orientation and the days leading up to school. Support ranged from modifying class schedules after they enrolled at Orientation (mentee 3, 4, 5), questioning their major selection or changing majors (mentee 4,5), seeking direction with math placement after changing their major

(mentee 4), housing (mentee 2, 3), and preparing for success on the first day (where to study, how to locate specific campus resources), which was relayed from mentees 1, 3, 4, and 5.

Participants shared stories of peer mentors guiding them through common tasks that were either introduced at Orientation and needed to be reinforced, or were not previously discussed. In addition to the general support, there were occasions where students turned to their mentor for urgent enrollment issues related to altering classes for a major change, needing to change their class schedule because of availability, or navigating the process when a student is dropped from a class by an academic department for low enrollment. Mentee 6, was in this latter case and was unaware of the situation until her mentor brought it to her attention after her mentee unintentionally shared her email on the screen.

> Mentee 6: "I was actually dropped out of a class on accident due to the class being closed, and she helped me on who to contact, and I ended up getting in. Again, just in time. And I generally feel really comfortable when I'm with her so she's been really helpful."
>
> Interviewer: "How did you know you were dropped from classes?"
>
> Mentee 6: "Okay, well, I didn't find out about it until the next day that I got that email. I got an email that said that I was getting dropped for another time, which I saw that email the next day. My peer mentor actually saw it on my computer. And I was kind of late, so I ended up emailing the lady, and she emailed me back saying that I still needed to request that class. I just had to do the whole thing

again. And I had a lecture and because I got dropped out of the lab afterwards because of that time being closed. And so I just got a different time."

The mentee disclosed that she was unaware of how to navigate the process to enroll in a different section once it was brought to her attention. The mentee stated that she did not understand the term section for the class, which was stated in the direction from the department email. The mentor explained the process and informed her how to enroll in the recommended course section.

Delivery of Timely Information

A key aspect of academic capital is providing necessary information in a timely manner, and this may be a critical component of addressing opportunity melt. Orientation has historically been the initial delivery of information and little follow up or engagement to new students following Orientation and a week before the start of classes. Most students, unless they are part of a formal support program, are not assigned a specific person to contact with a timely question. Orientation is a one-day session and can occur on any day from mid-June through early July. If a student attends Orientation in June, it is probable that very little engagement with them will occur until the few days leading up to the start of classes. The exceptions may include a few housing reminders on outstanding requirements from the Office of Admissions or University Housing.

The period between Orientation and the start of classes was when peer mentors provided timely information or reinforcement of information. Mentors followed up with mentors regarding their course schedule, guided them on which textbooks to purchase, how to obtain their Wildcat ID, discussed the latest Covid-19 protocol, and general advice about moving into the residence halls. Mentors communicated in a variety of

fashions, through their bi-weekly meetings, informal discussions outside of their meetings, text and through their professional social media accounts. Mentees 2, 4, and 6 relayed how valuable it was to have an experienced peer who they could contact during the summer months and first weeks of school.

> Mentee 4: "I've reached out to her multiple times about stuff that is going on, like, what resources where I can go …yeah, basically a big sister that I know has a wealth of knowledge, like to me, accessible."
>
> Interviewer: Can you further elaborate on that last point?
>
> Mentee 4: "Well, whereas other students, they don't really have that, and they'll maybe not the wrong people, but they'll ask their friends and then get misinformation versus actually getting the right information from someone that knows."

Mentees 2 and 6 also echoed this common theme, that they felt the mentors were accessible, a perception that encouraged the mentees to reach out when they needed support. It also allowed the mentors to provide answers to time-sensitive questions or items that needed clarification. When mentee 5 discussed her nervousness about starting school, her mentor walked her through a checklist of items to ensure she had her books, understood the purpose of and how to understand a syllabus (including major assignments and deadlines), and the location of her classes. In addition, the mentors helped interpret timely academic policy and checklist items, especially with students with extenuating circumstances. Mentee 4 changed his major after Orientation to one that required a math placement assessment, called the ALEKS. His mentor walked him through the process to confirm the new major and the process to complete the placement

assessment. The mentor also followed to check that the student had enrolled in the correct math course, which was different from his previous major, and the course he enrolled in at Orientation.

The mentees not only appreciated having someone available during this period, but also some to guide them with timely information. Mentors elaborated on common items, such as financial aid deferment, dates to modify their schedule, explanation of the first day of classes (i.e. detailed explanation of class syllabus, how college was different/similar to high school), what Wildcat Welcome entailed, and items to bring or not to bring to the residence halls. Classroom locations and campus navigation was discussed. Some mentees were also provided a tour of campus the days leading up to school. Students have historically been able to experience a general campus tour, but not a personal tour that physically took the new students to their classrooms by an experienced student. Mentor availability was welcomed and utilized by most mentees.

Peer Mentor Relationship Difficult for Professional Staff to Replicate

One additional significant finding is strongly related to the operations of the intervention, but not addressed by the research questions. The peer mentors served in a role that allowed them to be accessible, be relatable to their mentees, and provide information from a current student lens, which may have been more challenging for most professional staff. Peer mentors used their own relevant and recent experiences to share with their mentees throughout the intervention. Information ranged from the experiences of living in a specific apartment complex, specific course experience, or overall life as a Chico State student from a current student perspective. These personal experiences were

not only more relatable coming from a peer mentor, they were also insights that many professional staff do not have and would not be able to provide.

Mentees mentioned relating to the same background, interests, hobbies, or just connecting on a peer to peer level. The mentors had just recently experienced some similar challenges during the transition and had topical and relevant guidance to provide. The connection was strong for most mentee-mentor relationships, especially when they shared a similar background.

> Mentee 5: "When she told me that she was (hometown) I felt more, like, comfortable, because I knew how, like, where she was coming from and it was a similar place that she knew like my kind of struggle."
>
> Interviewer: "What do you mean about your kind of struggle?"
>
> Mentee 5 "She helped me with, like, one of the struggles was like, being away from family and like, coming from, like, being the first generation, and also being from, like, low-income. I talked to her about that and she helped me a lot. She gave me, like, examples and she gave like, the stories of, like, of herself. Like her family and everything... it was good because before she even told me I was, like, oh my gosh, like she's not gonna know me or relate to me well. She's not gonna know what I'm going through, but when she told me, like, those things. I knew oh yeah, she understands what I'm going through, and she can help me go through it so I don't have to, like, face those challenges by myself."
>
> Interviewer: "She seemed important to you."
>
> Mentee 5: "She was always there for me, even when I felt, like, down. She gave me resources to go and helped. Resources so that way they can help me out. I

enjoyed how, when I needed her help, she was there. If she didn't know the correct information, she knew where to, like, where to send me to get the answers that I needed."

Relationship building was important for the mentees. Mentee 4 described how important it was to have his mentor from his hometown. "We talked a little bit about like Sacramento where we're from and like what's changing and it just, it, it felt a lot like, like almost comforting to know that like, I'm not the only one. I'm not the only one from my high school that's there."

Mentees reported a level of trust and comfort with their mentors, which aided in building the relationship and level of trust. Most mentees had an interaction with their mentors before their orientation session. At Orientation, their mentor was their assigned Orientation Leader. Mentees disclosed that their relationship grew throughout the summer months, especially after Orientation. It is unsure if the time spent with their mentor in a virtual environment aided in the growth of the relationship, but a few mentees noted that their level of credibility in the mentor increased after the Orientation session.

A few mentees noted that they appreciated an informal check-in without a specific checklist. Mentee 6 said "we just talk about stuff that normal people do" but the mentee also described how the mentor aided in providing tangible advice for the upcoming semester. Thus, the relationship formed was based not on one factor (i.e. pure business or social), but was developed on a mentee and friendship basis for most of the mentees. Stories of sharing Instagram or Tik Tok videos. Said mentee 4, it was just easy to relate to her right off the bat. The relationships continued after the intervention. Mentors informed me that they would remain in contact with their mentees, continue to address

general questions, and attend school sponsored social events well into the fall semester. Most professional staff would have had additional challenges building peer relationships with their students, or would not have had access to the information the peer mentors were able to deliver to their mentees.

CHAPTER 5

DISCUSSIONS OF FINDINGS

My problem of practice investigated the influence of peer mentors on enrollment and academic capital of incoming students while transitioning from high school to California State University, Chico. For the past 9 years, I have worked in the orientation and transition field at two colleges in the California State University system. I have noticed the lack of support provided to incoming students during the intention to enroll through the start of college classes at both institutions. From my experience, and the findings of previous action research cycles related to this project, incoming first-year students in transition to college form a population that is lacking adequate support for a new and often challenging passage for many students. Some students who have intended to enroll are not present when classes began. Others are not adequately prepared to start their journey from the institution. Through this study, I was interested to discover if additional peer mentoring support over the duration of the summer months would provide a positive and useful influence in regard to enrolling and enhancing their ability to be successful during the initial stage of college.

To address the challenge of insufficient engagement from the institution, I created an intervention that matched 24 new students to trained peer mentors, each of whom was a current student at Chico State, and one who could help them increase their academic capital and guide them through the transition. Through the intervention incoming students met with their assigned mentor on a bi-weekly basis from early June through the third week of September. Mentors were orientation leaders and were trained on the fundamentals of students in transition and academic capital theory. The peer mentors

were provided with guided discussion points for each meeting and provided sufficient time to prioritize questions and concerns of their assigned mentee.

Since I was leading the Orientation and New Student Programs department, I was well positioned to manage this intervention. I individually selected the experienced student orientation leaders and had the means to employ them while serving in this role to mentor incoming students in the summer. Because the intervention took place during the Covid-19 pandemic guidelines, and orientation sessions were delivered online, the student leaders were not working as many hours as a typical year during each orientation session and had the ability to serve in this role. An opportunity to provide additional hours was a compatible fit for the department. The student leaders were on payroll and had the opportunity to work.

Additionally, I had the ability to pair the mentees with their assigned mentee during their orientation session. At Orientation each mentor led a group of new students, introduced academic requirements, discussed campus resources, and met individually with the new students in their group. This further assisted in developing mentor to mentee relationships and credibility in the project. The formal orientation experience aided in integrating with the intervention.

The intervention was framed by the following research questions:

1. What is the influence of a peer mentor assigned to incoming first-year, first-generation Chico State students on retention through the census date of the fall 2021 semester?

2. How do incoming first-year, first-generation Chico State students perceive the increase in academic capital through their experiences with an assigned peer mentor?
3. To what extent do incoming first-year, first-generation Chico State students perceive the support from their assigned peer mentors in successfully navigating all new student requirements (Orientation attendance, securing housing, enrollment, transcript submission, financial aid/fee payment planned, attendance at census date)?

Lessons Learned

The framework of action research was an ideal practice to employ this study. Through multiple design iterations I was able to learn and refine the practice of pairing mentors with incoming first-year students during their transition to college. Some of the lessons learned outside of the research questions are important to successful implementation of a mentor program for the summer transition. For example, from previous cycles I learned that it can be challenging to develop trust through a cold call. The new students often did not answer the phone or questioned the validity of the support offered. Mentors recommended creating a page on the Chico State Orientation website that detailed the program and had a photo of each mentor with a short biography. Mentors found that directing prospective mentees to this page during the initial call increased trust and credibility.

Mentors also found success connecting to students via social media platforms, such as Instagram. Two mentors created specific Instagram accounts for the group and allowed their mentees to join. They shared timely posts from the college, posting general

advice, but the use of Instagram was also a familiar way for mentees to inquire, clarify and communicate with their mentor. For some mentees this was their primary mode of communication with their mentor outside of their biweekly meetings. Mentees got to know their mentors on a personal level as they would post information about themselves, their pets, interests, etc. It also aided in helping mentees connect with each other and learn that they were not the only mentee in the program. It is important to note that this Instagram account was a professional working account and was separate from their personal social media accounts.

Another challenge was the start date of the study. Mentors first contacted their respective mentees in early to mid-June. Ideally, contact would have been initiated in late April/early May, immediately after admitted applicants stated the intention to enroll. This timing would have also afforded an opportunity to have an overlap in support between each incoming student's respective high school teachers and counselors, on the one hand, and our mentors, on the other. As the initial meeting was in June, most students who were a part of the study had fully committed to the institution, and had graduated from high school.

Study Findings in Relation to The Theoretical Perspectives Guiding the Study

The research student applied both Schlossberg's Transition Theory and Academic Capital Theory. Schlossberg's Transition Theory was a general theoretical perspective that helped contextualize the transition to college and influence of peer mentor support. Entering the initial stages of the study, it was the primary framework that the mentees were introduced to and guided to follow. The theory provided a general guideline can apply to the experience of students in transition to college, and in Chapter 2 I argued that

it could explain opportunity melt, as it showcased how different individuals experience, adapt, and integrate into a similar transition differently. As Schlossberg (1995) suggests, each student experiencing a similar transition can vary in their lack of control, or desire to persist. Throughout the intervention mentors served as an additional support resource who informed and educated the participants on strategies to integrate new practices into their daily life and the overall role change.

Mentors educated the participants on new strategies to navigate the college landscape, cope with homesickness, and modify their course schedule. The mentors played a supporting role, which was the most described word from the new mentees, by providing a listening ear or making the transition "less scary." Participants shared demographic information of themselves, which aided in the development of the mentee/mentor relationship. It also helped the mentors guide the mentees to campus clubs and organizations that aligned with their values or background.

Although Schlossberg's Transition Theory had merits and can be of value to a peer mentor study of students in transition, academic capital theory was a more relevant and viable framework to support students and their families in the transition. The guiding framework that includes easing concerns, building trusts, delivery of timely information, expanding networks, encouragement, developing cultural capital, and educating the family is one that was applied in the study and the mentors were able to put into practice. The mentors were taught the fundamentals of the theory and practical ways to incorporate it during their sessions. The theory of academic capital is framed to include first-generation students that may need the most support during the summer months. Students expanded their academic capital and nearly all aspects of the theory were applied during

the intervention. The theory's concept and perspective of inclusion, trust, expanding networks, and encouragement was tangible and resonated with the peer mentors.

Implications for Practice

The study employed a mixed method design approach to better understand the potential influence of the intervention on incoming first year students at Chico State. The study includes multiple implications for future practice. The first is an overall better understanding of the needs of first-year students in their transition to college, targeted support for new students throughout the summer months, and an application of academic capital theory to students in transition. Each implication for practice is further elaborated in the paragraphs below.

Greater Understanding of the Self-identified Needs of First year Students in their Transition to College

Students in transition to college have often experienced a gap in support over the summer months. Many onboarding programs do not offer an Orientation until mid-June, and some students may not participate until August. Students with uncertainties or misconceptions prior to Orientation may not initiate communication with the campus, or understand how to navigate new challenges in the collegiate environment. Even students that attend Orientation early in the summer often have a large set of questions leading up to the first day of classes. Campuses have historically not provided adequate support that encompasses the full duration of the transition, especially the period before Orientation and post-Orientation. Many bridge programs have had success, but they have not been extended to the full campus community.

In addition, the culture of some colleges has historically encouraged a level of summer melt as an initial diagnostic to assess the interest level of students in attending their institution. More recently, with fewer students graduating from high school and more first-generation students, institutions have an incentive to re-imagine the support provided to admitted students during the summer transition. The support not only can help reduce summer melt, increasing enrollment amongst demographic decline, but it can also provide additional level of preparation through the boosting of academic capital, confidence, and awareness as students begin their college careers. Time and guidance in students before courses start may lead to a fruitful investment.

Lastly, this study can further assist higher education practitioners be more aware of and advocate for the needs of students in transition. Understanding when resources and services should be promoted and are available to incoming students is a vital portion of the onboarding process for all campus entities.

Targeted Support Throughout the Summer Months

One of the most practical findings from the study was the need for consistent support throughout the summer. A one-day Orientation session in the summer was not sufficient to address the needs of the incoming students. Mentees had many questions that included basic needs for success, such as how to access their student portal, locate their physical classes, and purchase the correct textbooks. Many did not know what they did not know. Some were previously informed of this information but had lingering questions. Mentors helped leverage this historically underutilized time by answering or connecting students to the appropriate resource.

The needs of incoming students are diverse. Students have different needs and questions depending on the stage of the transition. Questions varied in the early and later stages of the transition. For example, we noticed that students tended to have most financial aid questions in the early stages of the meetings. Questions regarding housing varied. In June most students had questions about their living situation (which residence hall they will be assigned, assigned roommates, available apartment complexes). In August more detailed questions about move-in, size of bed sheets and housing amenities became more prevalent.

Early student engagement can contribute to a feeling of belonging and membership (Kuh, G. D. Cruce, T., Shoup, R., Kinzie J., & Gonyea, R.M., 2008). Kane et al. (2019) also listed the merits of belonging to the campus community via early engagement, especially in regard to university onboarding activities. The results of the study seem to align with existing research, as students assigned a mentor were more engaged and involved than the student interviewed in the control group.

In addition, there were instances where new students needed support after mentees experienced a successful Orientation session, only to decide a few weeks after the session that they wanted to change their major. The students met their first preferred major department at Orientation, but there was not a system of support for students who wanted to change their major after Orientation. A parallel case is with individual course enrollment changes, as occurred with mentee 6, whose introductory biology course was cancelled due to low enrollment. The department emailed her, but she did not understand the language in the email (e.g., the phrase "course code"), bureaucratic language that a more seasoned student would have recognized. Her mentor was able to intervene, and

while we cannot draw a causal conclusion, it is very possible that without an active mentor, her first semester would have had incorrect course enrollment or, at the very least, unneeded confusion and additional stress to begin the semester.

This action research study showed how having an experienced peer to support them through the journey helped increase preparedness, knowledge, and social capital to start their academic journey. It often showcased how different students had different needs. Often times, the "hidden curriculum" of college, such as finding a good place to study, study tips, or time management are not discussed because time is lacking during the formal Orientation session. Employing a flexible approach and spending time to learn the unique needs of the students was valuable. As the needs of students will continue to change, it can be vital for a program that enacts these practices to assess the continuing needs of the student population that is served.

Enrollment Mangers Including the Concept of Opportunity Melt in Future Interventions

23 of the 24 students in the experiential group were enrolled during the census. The study approached the intervention to support students who may have needed additional support during the transition. Students were more informed, supported, and became more engaged as a result of the intervention. The concept of opportunity melt should be one that is better understood and explained by enrollment managers. Not only does it frame the issue from an equity lens, it further defines populations of students that are often included in the larger umbrella term of summer melt. The term opportunity melt can thus help distinguish the institutional mission of broadening access from the institutional incentive to increase enrollment. To address and support the needs of

students in transition, we must understand that there are populations of students currently described as summer melt students who are not contemplating a gap year or are simply weighing multiple college options. Enrollment managers should include interventions to inform and support students in transition, and not only employing interventions that frame the issue of summer melt as retaining students over the summer months over competitor schools. It should be recognized that students that have confirmed their intention to enroll at an institution and may not attend any college in the fall because of a lack of support and guidance in navigating the transition.

Issues regarding Transferability of Findings

This action research study has several limitations: small sample, inconsistent participant engagement, the duration of the study, and challenges presented by the ongoing Covid-19 pandemic. Each limitation is further described in the section below.

Study Participants

Although over 2,300 new first-year students submitted an intention to enroll at Chico State, this mixed-methods study included only 31 incoming students to the university. All were self-identified as first-generation students. The initial desire was to include at least 120 students in total, split among a control and treatment group. Unfortunately, a smaller sample size of new students was the result even after multiple email requests to increase participation. Reduced participation may have occurred because email, which was the primary mode of contact, required the new student to read a long and detailed recruitment email, click to see the consent form in a web page, and opt in to be a part of the study. All students who completed the initial survey with a shortened academic capital scale were invited to complete the scale again in September,

but the response rate for completion of the academic capital scale was unfortunately low (n=6) and only a slightly higher number (n=7) consented to an individual interview. This resulted in descriptive analysis that was limited in the generalizability of the incoming student experience.

In addition, the study lacked demographic data other than what was evident from direct contact. It did not include demographic data to further understand the experience a new student encounters based upon their unique background. Students from different races, ethnicities, identities, or transitioning from different geographic locations may experience an intervention of this nature differently and have additional needs that were not fully addressed in this study.

Participant Engagement

Many of the participants actively engaged in the process, met with their mentor on a bi-weekly basis, and followed through on the recommendations of their mentees. On the other hand, three only had limited contact with their mentor following their initial session. A few decided to discontinue their involvement after their initial interest in participating in the study, and two attended because they believed it was a requirement to be a part of the study. The level of engagement differed greatly among the participants.

Duration of the Study

This action research study was only able to capture data for mentoring support from mid-June through the fourth week of study. It did not include data from an early period in the transition, or post census. High school students who are intending to enroll at a college can encounter transitional challenges that may influence their decision to continue with their initial ambitions, especially during the months of May and early June.

Challenges include navigating the financial aid process, immunization requirements, and securing housing. This period can be a period when students are considering whether to follow through with their decision to attend college. Assistance in navigating the institution would be welcomed and warranted for many new students, and even without assignment to treatment or control, the later starting point is in effect a selection of participants.

Challenges with Covid-19

The cohort of participants also encountered additional challenges related to their transition occurring during the Covid-19 pandemic. Many students had a portion of their high school experience moved to online instruction, and thus in contrast with previous cohorts from the same schools, they may not have experienced the same level of interaction and discussion with their college counselors. In addition, some students may have been apprehensive about starting their college journey in the fall of 2021. In California all public colleges shifted to primarily virtual instruction, and Chico State enacted a higher level of safety precautions than most schools in the state the previous year. Many incoming students were aware that in fall of 2020 Chico State initially invited students to their residence halls and planned to offer 15% of classes in person, but the campus closed after the second week of instruction. Students were required to vacate the residence halls and were not allowed to return for the full year. As the Covid-19 strain of the Delta variant was detected in the summer months and Chico State adapted their policy the previous year to close the campus based on safety concerns, some students may have also altered their college-going plans that preferred colleges that were planning to remain open.

In addition, in May 2021 the California State University announced a requirement for Covid-19 vaccines for in-person study. Although many students were pleased with this announcement, some students were hesitant to comply with this requirement and may have selected to attend a different institution, or no institution of higher education, based on the new requirement.

Finally, this cohort was at a greater disadvantage of not knowing about campus before the start of school, as the campus was closed and not providing campus tours until mid-May. Some mentees said that they knew a little about the physical landscape of campus and had been to the university once but only walked around unguided. This placed mentors in the position of needing to support and educate students regarding on-campus resources, an obligation that would often have been met in a traditional year by incoming students' attending an in-person Orientation session.

Mentor Roles

The positionality of my role made implementation and deployment of the student mentors easier than if I was not associated with the Orientation program at Chico State. All mentors were Orientation Leaders for at least one year, and I had a close relationship with each mentor. They were all employed as Orientation Leaders over the summer, and I had trained them, include their knowledge of an advising role.

Just like any student employee, the peer mentors also had commitments that interfered at times with their ability to be mentors to the new students. They were all in school themselves during the start of the fall semester, a few encountered personal challenges that required them to reschedule meetings, and one mentor had to stop

participation because of personal commitments. I also had to devote additional time for them to not only check in with them on both personal and work matters.

Future Directions

While this study may have collected limited data on the peer mentoring influence of first-year students in their transition to college due to low participation, the study illustrated a need for support of incoming students outside of a traditional Orientation experience. Many participants shared the value of having a personal contact, one that had developed a relationship of trust, a person with whom the mentees could communicate questions or challenges that arose during the summer months and first few weeks of school. It was also apparent that a one-day Orientation program is not sufficient for students to be informed on all of the practical information to make a successful start in college, or even retain all of the quality advice they received during their Orientation session. Participants asked questions that they were informed at Orientation to their mentor as the first day of school approached.

Programs with a similar nature of this intervention should be aligned with Orientation efforts to further reinforce information provided and deliver timely information as the first day of school approaches. As mentees contacted their mentor on a variety of topics ranging from basic questions, such as how to purchase books, to more complex questions, about accurate major selection based on interest or roommate challenges, these common topics should be introduced and reinforced throughout the duration of the program.

It may be possible for a study that is employed from mid-April, or even after the student formally confirms their intention to enroll at the institution, to further uncover the

challenges or provide additional understanding of the needs of the students throughout the initial stages of the transition. It may also further continue to the earlier development of a relationship between the mentor and mentee that may further contribute to reducing opportunity melt and increasing success. As this intervention occurred at Chico State University, which is a member of the 23 California State University system, close coordination with admissions must occur, especially during the spring semester, to ensure the students have not been rescinded from the institution, withdrawn their admission, or be in communication with students that are admitted later than they typical cycle for extenuating circumstances or re-directed from another CSU.

Students from different backgrounds may also experience the transition differently and have unique needs that could be better supported during their time frame. With additional data on the challenges students encounter based on race, ethnicity, personal identities, geographic background or additional characteristics, institutions of higher education may better support all students as they transition to college. Pairing mentor to mentee on background characteristics should also be considered. Mentees stated how they connected with their mentors who were also first-generation students, and those with the same or nearby hometown. Instead of major, mentees may be able to list their own unique characteristics (race, ethnicity, hometown, interests, first-generation status) and pairing preference. This would also allow the students to self-disclose their personal characteristics and desire to be paired by them.

In addition, the unique needs of students from outside the Chico area, more specifically Southern California, should be further explored. About 60% of incoming students select to live on campus. At times the housing on-campus can be full when

students are exploring housing options. The needs of students that are moving into off-campus housing should also be explored.

Additional study should also be developed to examine the long-term influence of mentoring to be extended through the first semester, or even first-year of college. Retention rates for those with an assigned mentor should also be examined, specifically through to the beginning of the second semester of college and overall sense of belonging and integration to the institution. These interventions could be merged with a summer intervention (i.e. having the same mentor for an extended period of time), or an official handoff to a department, specific faculty or advisors, or separate mentoring program. Since many faculty and professional staff have limited hours during summer, or are even off contract, the peer-mentor type of intervention in the summer before enrollment could simply provide a bridge of support while staff are unavailable and have an official handoff where the mentee physically introduces the student to the staff taking the lead, or even an event that brings all parties together to end the summer mentoring and handoff to the new member. If finances and resources allow, the student mentoring can continue with faculty collaboration.

An intervention of this nature should not be conducted in a silo of orientation staff. Various campus departments should be well aware of the intervention, it's purpose and their role. Departments such as Admissions, Financial Aid, academic and faculty advisors, specifically if they assigned to some of the participating students, and other mentoring programs. This also allows sharing of information and cross department coordination. Students frequently list that they have questions about financial aid, and scholarships. Partnerships could be formed to have financial aid offer a session in

August or the start of school, especially if a student adds or drops courses and influences the amount of aid available, or communication is a student is selected for financial aid verification and is not following up. The mentor could play a role to contact the student and stress the importance of the task. These types of collaborations should not stop with financial aid. The Career Center could play a supporting role for students interested in obtaining an on-campus job, or questioning their major post Orientation.

For an intervention of this nature to be successful, overall institutional support will be necessary. Since some departments and staff are unavailable in the summer months, future interventions will need to account for this potential absence of support or have a reliable contact for students. Although the demand may not be as high as during the semester, this study demonstrated that the need does exists. In addition, for the intervention to be sustainable, more than one professional staff member must aware of the intervention and able to step in to support the mentees. Ideally, supervision of a mentoring program could be embedded into an official job description. Since the summer is the busiest time for the orientation staff, an additional professional staff member in the office may be necessary or a staff member who is well aware of the intervention and could provide auxiliary support in the summer months.

Mentors were trained to initiate the contact with their mentee and take the initiative when needed. This was particularly important when scheduling the first contact and following up or when mentees missed their appointments. At times mentors had to be persistent and needed guidance when students would not respond. Obtaining multiple points of contact and preferred contact (phone, text, personal email, school email, direct message on Instagram) would be helpful to obtain during the first meeting. In addition,

mentors were trained to not provide their mentees answers, but connect them when they were struggling. Mentors were taught if they did not know the contact to work with their mentee to see if they could find the appropriate resource before asking their supervisor.

In addition, the level of the frequency of contact can also be examined. Mentors and mentees met bi-weekly throughout the summer months. This seemed to be suitable for most mentees, but further study should explore if the frequency is too often or should be reduced. If meetings are held further apart this may allow the mentors to meet with additional mentees and expand the population pool. Lastly, since this study took place during the Covid-19 pandemic, mentors and mentees we're not able to meet in-person, including Orientation. In future cycles it should be explored how the physical meeting during the summer can influence the overall intervention. If mentors and mentees are paired by geographic region or hometown there may be opportunities to meet in those locations.

Throughout the study it was surprising to observe the influence of information delivered to not only the mentees who participated in the study, but also the circle of influence the mentees possessed. Mentees shared that they would relay information communicated with them from their mentor to other friends, acquaintances, and classmates. Administrators should take this into consideration when considering how to inform students of successful practices or a cultural shift that administrators would like to communicate with the incoming student body. Mentees could also be encouraged to utilize social media, if they feel inclined, to communicate the valuable information that they have acquired and would like to share with their peers and extend to the broader campus community.

As the university is planning to offer virtual orientation sessions in the future for students that are unable to attend in-person, and thus less time with students, having student mentors to connect with students throughout the summer months may be even more vital. If this is an implemented practice, mentors could use this time for additional time management activities, continued delivery of timely information, a phone call before meeting in person, and additional in-person activities once the students arrive on campus.

The level of support and engagement for parents/supporters of the incoming students should also be examined during the time of transition, especially during this time when they may be seeking ways to support their student. Academic capital theory supports programs that promote the involvement of students and their supporters, and this approach can be another valuable tool to support incoming students. One student mentioned how she was experiencing homesickness and was considering leaving the university to return home. If parents are not equipped to support students and direct them to appropriate resources, this lack of support can cause further attrition and students' leaving the institution prematurely.

Additional action research efforts may be beneficial to be applied to the transfer student community. The transfer student population experienced different challenges and additional support may be warranted. This is a growing population of students and it could help students be engaged with the campus community and utilize important resources, such as the Career Center, at earlier stages to prepare for life after graduation. This could also aid in creating greater community and identifying the needs faced within the transfer student population.

Finally, reducing opportunity melt must align with the larger university strategy. If the institution is not adequately prepared to make available campus resources to students during the transition, or enrollment management is counting on a level of melt in the summer months to avoid what it considers over enrollment, the college must consider the adoption of a similar intervention. The mentors often referred students to a variety of campus departments. Some department did not respond. Others had an out of office message that informed the student that they would get back to them at the start of the semester. These examples could have imposed further challenges that would have interfered with the overall efforts of the program.

It may be possible to also integrate this type of program into the larger university efforts. For example, the California State University Chancellor's Office recently listed five priorities for all 23 campuses (Graduation Initiative 2025 Equity Goals & Priorities, 2021). Priority 3 sets the goal for all students to have access to an electronic degree planner. Per the memo, all California State University students would benefit from understanding how to remain on track to meet their academic goals by accessing and utilizing their degree planner. Increasing understanding and familiarity with the degree planner was a common theme expressed by the mentees. It was clear that the mentees felt more comfortable with the tool during the conversations that occurred after Orientation, not necessarily during the Orientation session. Larger institutional and system goals should be examined to see how they can be included in mentoring efforts during the transition.

Conclusion

Tinto (1987) contends that new student persistence required that the student "make the transition to college and become incorporated into its ongoing social and intellectual life. A sizeable portion of vey early institutional departures mirrors the inability of new students to make the adjustment to the new world of the college" (p.135-136). This statement was made over 30 years ago and still remains accurate. Historically, most institutions have not begun investing in their student population until the new students arrived on campus. Some institutions even placed barriers in place in the summer months, such as not providing financial support to attend a formal Orientation program, or using the Orientation as a gatekeeper that presumably predicted the level of interest and persistence of students. One higher education administrator even told me that they wanted a level of melt to occur to better assess who was committed to attending the institution.

This old practice is no longer a viable option for colleges to pursue. The student population has changed significantly in the past 10 years, and changes will continue. The incoming class of students is more than 50% first-generation students. Many do not have a trusted contact to locate reliable information or are properly informed of resources to support the transition to college. Even those students who do have sufficient support systems to provide guidance when navigating a new college environment can find the transition stressful and unclear. These added challenges with lack of proper support can make students question whether they should continue to pursue a college degree. An email or social media communication alone will not stop opportunity melt. In the intervention program described in this dissertation, a few one-on-one sessions had to

occur for most mentees to share information with their mentor. Mentoring and multiple interactions were vital to the future success of the incoming students.

Students need support through their transition to make it to the first day of classes, and also to be better equipped to be successful once school begins. Multiple contact points from trained student leaders can deliver timely information, expand the level of knowledge, and expand the network of new students by developing trust. Higher education professionals have a responsibility to understand the needs of students once they are interested in attending an institution, not only when they begin their studies. We also must be aware of the demographics of our student body and how their needs differ from student populations of the past.

Although this study examined a four-year public university in Northern California, the findings may be transferable to a variety of institutions. Investing in students at the beginning of their college experience can help reduce the opportunity gap and equity gap. It can help students feel more comfortable, confident, knowledgeable, and resourceful when they begin their college studies. Because of timing constraints and the overwhelming number of students to serve in a short period of time, the current onboarding process at many institutions is designed around a process to learn the basics of the institution and be able to survive. Integrating a mentorship program of a longer duration can transform the onboarding experience from one of survival to one of success.

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APPENDIX A

FIRST YEAR STUDENT INTAKE SURVEY

Hello new Wildcat! Your Wildcat Orientation Team is excited to meet you at Orientation! Please answer the questions below as soon as you can. It will only take 5 – 10 minutes. Your answers will help us plan and support you during your Orientation session.

1. Chico State University's Orientation program is conducting a study of students to better understand and support students in transition. Would you be interested in being assigned a current Chico State student to contact you every two weeks over the summer months to check-in with you and provide additional support?

   Yes/No
2. Has anyone in your family (parents, siblings) attended college?

   Yes/No
3. How confident do you feel about being a successful Chico State student?

Very Confident	Somewhat Confident	Less Confident

4. Why did you decide to attend college?

5. What is your intended career? What led you to this choice?

6. What are you most excited about as you begin college?

7. What are you most concerned or worried about as you begin college?

8. Finally, to help us better get to know you, is there anything else about yourself that you would like to share or think that we should be aware of?

APPENDIX B

ACADEMIC CAPITAL SCALE

Participants were asked to complete the following survey on a 6-point Likert scale. A score of 1 corresponds to strongly disagree, a score of 6 strongly agree.

Trustworthy Information

1. I am more trusting of information about my education that I receive from my college than of information about my education that I receive from my family.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree

2. I am more trusting of information about my education that I receive from my college than of information about my education that I receive from my friends.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree

3. I view people who work at my college as trustworthy sources of information.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree

Overcoming Barriers

4. I am confident that I can overcome any barriers to my success in college.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree

5. Despite any obstacles that I face, I am confident that I can continue attending college.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree

6. I have overcome the obstacles that would prevent me from being a successful student.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree

7. Are you available to meet for a 30 minute individual interview to further elaborate on your responses as part of this research study? Yes / No

APPENDIX C

SEMI-STRUCTURED INTERVIEW QUESTIONS

There will be three groups of interviewees; students who participated in the intervention, students who did not participate in the intervention and were enrolled in the fall semester, and students who intended to enroll but did not enroll in the fall semester. The following questions are listed for each group. I will begin the interview with established open-ended questions and follow up based upon individual responses.

Questions for students who participated in the intervention:

1. Describe your experience with your assigned peer mentor?
    a. Can you describe a time when the peer mentor provided information that you were not aware of? Did that have any affect on your transition?
2. What aspects of the meeting did you find useful?
3. What were two or three items that might have needed action that arose in your conversations?
4. What influence did the peer mentor have on your understanding of campus resources?
    a. What campus resources did you learn about during your meetings with your peer mentor?
5. How important was having an assigned peer mentor during the summer months?
6. What influence did the peer mentor have on your decision to attend class in the fall at Chico State?
7. What influence, if any, did the meeting with your peer advisors have on your ability to meet other students?
    a. Staff?
    b. Meeting with a campus club/organization?
8. How do you think the meeting with the peer advisors affected your ability to be successful in college?
9. What issues/concerns do you think students have when transitioning from high school to college?
10. What do you wish students knew before attending Orientation?
    a. Did your peer mentor provide this information?
11. What do you wish students knew before attending the first day of college?
    a. Did your peer mentor provide this information to you?
12. How could the peer mentoring interactions be made to be more effective in the future?
13. How can an assigned peer mentor be best used to prepared students to be successful in college?
14. What other comments do you have?
15. What questions do you have?

Questions for students who did not participate in the intervention:

1. How was your experience transitioning to Chico State over the summer months?
2. Would an assigned peer mentor have been helpful to your success in the transition? a. Why/why not?
3. What were two or three items that may have been helpful for you to have known during the transition to Chico State?

    a. Why?
4. How familiar are you with campus resources?
    a. Can you name two or three resources that may benefit you while you are a student at Chico State?
5. How comfortable do you feel joining a campus club/organization?
    a. Do you know how to do join a club/organization?
6. How do you think a meeting with a peer advisor over the summer months would have altered, if any, your experience during the summer months?
7. What issues/concerns do you think students have when transitioning from high school to college?
8. What do you wish students knew before attending Orientation?
9. What do you wish students knew before attending the first day of college?
10. How can an assigned peer mentor be best used to prepared students to be successful in college?
11. What other comments do you have?
12. What questions do you have?

Questions for those who participated in the intervention and did not enroll:

1. When did you make the decision not to enroll at Chico State? Why?
2. How did you make that decision?
3. What were the factor(s) that made you decide not to enroll at Chico State?
4. What could the university have done to support you during the transition to Chico State?
5. Would an assigned peer mentor have been helpful to your success in the transition? a. Why/why not?
6. Is there anything that came to mind that you thought we need to know so we can do better at Chico State?
7. What other comments do you have?