

STARTING COLLEGE DURING COVID: EXAMINING WHETHER SUMMER
BRIDGE PROGRAMS' INITIATIVES, GOALS, AND OUTCOMES TRANSLATE TO
A REMOTE ENVIRONMENT

by

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To my parental units: the Entity and the Deacon

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VaNessa Patricia Thompson

ABSTRACT

STARTING COLLEGE DURING COVID: EXAMINING WHETHER SUMMER BRIDGE PROGRAMS' INITIATIVES, GOALS, AND OUTCOMES TRANSLATE TO A REMOTE ENVIRONMENT

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This dissertation investigates the experiences and outcomes of students who participated in remote summer bridge programs during the COVID-19 pandemic which was the 2020-2021 and 2021-2022 academic years. The study aims to evaluate the impact of these programs on overall student persistence. Student persistence is the participants' attributions, retention, self-efficacy, and sense of belonging. The remote summer bridge program cohorts will be compared by in-person cohorts in years previously and following. Utilizing a sequential mixed-methods approach, the research examines quantitative data on retention rates and GPAs, alongside qualitative insights into students' personal growth, confidence, and sense of belonging. The findings reveal that remote summer bridge programs enhanced students' preparedness for college-level work and fostered strong social connections and community despite negative attributions about the remote facilitation. Lastly, recommendations are provided for incorporating remote learning into future summer bridge programs and suggests longitudinal assessments to evaluate the long-term impact on student success.

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CHAPTER ONE

OVERVIEW OF DISSERTATION

Overview

The world has changed significantly since March 2020, especially in the classroom and the overall education experience. According to the National Center for Education Statistics (NCES) (n.d.), after the 2019-2020 academic year, there were 3.1 million high school graduates from a public high school. Those students traded the typical celebrations and experiences, like graduation and prom, for the stress of being unprepared for remote experiences.

If the conclusion of their high school experience needed to be challenging, the start of the post-secondary experience would also be overwhelming. However, the projected 2.9 million first-year college students beginning the 2020-2021 academic year (Hussar & Bailey, 2019) have experienced challenges entering an unfamiliar virtual and collegiate environment. The virtual environment impacted them significantly, leaving them unprepared for the university experience. Overall, many high school graduates and first-year students had their academic preparation time interrupted by the global COVID-19 pandemic.

Now, higher education institutions have the burden of providing the academic and social preparation students still need to get in their final years in high school. Colleges and universities have risen to the challenge, providing experiences and programs to help these students. Summer bridge programs have offered an excellent opportunity to transition students into their academic homes. Despite the popularity of bridge programs,

not all students can take advantage of them. Approximately “...over 200,000 undergraduate students [participate in a summer bridge program] each year...” (Douglas & Attewell, 2014, p.88). When comparing the 200,000 undergraduate participants with the potential 2.9 million first-year students, approximately less than 10% of students can take advantage of this helpful program.

Now more than ever, students will need support as they make their academic transition into college, especially for underrepresented minority students. Engle et al. (2006) stated that summer bridge programs were beneficial for students to bridge this challenging experience by showing students the administrative demands, like course registration, and how to succeed at the institution. With the global pandemic’s current and residual impact trickling into the students’ efforts in the classroom and professionally, higher education institutions must be ready to assist with potential unique barriers.

For my dissertation, I will examine the 2020 and 2021 summer bridge program cohorts and their persistence and retention at the institution. These cohorts participated in summer bridge program remotely as the U.S. practiced sheltering in place, wearing masks, and social distancing from March 2020 through April 2022. Components of attribution, self-efficacy, resilience, and sense of belonging appear to be the most beneficial to explore students’ engagement and retention during the 2020-2021 and 2021-2022 academic years. Lee et al. (2021) explained that “many successfully completed the courses and reported that [students] learned ‘new systems,’ ‘a new way of education,’ and ‘time management skills’ during the pandemic” (p. 167). Through these new systems, students built efficacious skills to persist during the virtual environment, which, in turn, built resilience. Through my dissertation, I can explore the idea that the resilience built

specifically during summer bridge program may lead to a higher retention rate than those who did not participate.

Background

When discussing first-year students, universities typically look at students who are entering college for the first time from high school. Other student populations, such as non-traditional students and transfer students, are important to examine as well, but will not be the focal point of this study.

When registering for classes, students had a lot of control over what day, time, or location their class was. However, the remote environment allowed students to engage with the course differently. Miller (2011) stated, “Students wish to participate in the way they want, depending on their changing schedules, the course subject and the content at any particular time in the semester” (p. 449). For example, a point of contention for many professors was students turning their cameras off online. In the classroom, professors can observe students who are not paying attention while lecturing. When professors notice students getting distracted by devices or having disruptive side conversations, professors have an arsenal of proven tactics to get students back on track. Some may walk around the classroom, making eye contact with the students. Others may call on students for them to share their thoughts (or their conversations). With online remote lectures, professors may be unable to rely on many of the same in-person tactics. Students in remote environments have the freedom to multitask and disengage from the lecture.

Though the flexibility of the virtual classroom was cool for students, students began to feel the weight of the responsibility for their success in a course. All

complimentary resources, like tutoring or advising, were in the virtual space but had to get to. For example, through my student meetings, first-year students enjoyed the flexibility of online classes but did not partake in various ways universities provided support. First-year students were either anxious about the support or realized they could master the information faster if they could get support in-person. Instead of campus resources being intrusive in providing support, the professionals and professors had to wait for a student to bring them into their world.

Though the students like the autonomy and control of their learning experience, university staff and faculty often feel that it may be too much too soon after students' high school experience. Like students learning how to execute presentations and teamwork while learning about a topic, students are also learning things that would be helpful out of the classroom and in the real world. For example, students are not experts on time management; that lesson is crucial, especially in their first year. Students mistake their time as being more available because they are not in the library or the classroom. Students still need assistance in navigating through the material and what is expected of them as participants in the classroom (Morgan, 1995). Students cannot be expected to know proper classroom etiquette when they are learning remotely in their bedrooms.

During the pandemic, first-year students may have been at home learning, but their responsibilities increased. Coe et al. (2022) stated "many [students] have already taken on adult responsibilities as they start climate movements, lead social justice marches, and drive companies to align more closely with their values" (p. 7). The students are already dealing with very heavy adult themes thanks to the pandemic, such as childcare, bills, mental and physical health, etc. College administrators and faculty

need to examine first-year students with a different lens. These experiences impact their perception and success in the learning environment. Universities should give them more support as well as more credit when it comes to navigating their experience in higher education. Because of what they have experienced, the students can still be students of the subject while collaborating with their instructor.

Because of the contextual challenges first-year students faced prior to attending college during the pandemic, students have challenges maintaining and grasping certain courses, like writing and math. Many students, like those in the summer bridge program, are having challenges in writing and math. These challenges may result in students taking remedial courses that do not go towards their degree but hopefully goes towards their foundation for future courses (Means et al., 2014, p. 143). Though the classes provide an adequate foundation, the classes may have created a barrier that is hard to complete.

Higher education institutions are in a difficult position. These institutions want to provide the best avenue for success for students. However, the required foundational courses can be more harmful than helpful. “Colleges that fail to meet this challenge end up as a revolving door, with students entering and starting developmental education courses, failing or dropping out, and being replaced by new students with the same issues and the same low prospects for success” (Means et al., 2014, p. 159). Institutions must do more than provide access to students during the pandemic. Universities must assist students and encourage them to take advantage of support services. Providing access, especially during the pandemic, cannot be the only way to help students be successful.

When discussing online learning during March 2020 and April 2022 in this dissertation, I will be referring to the forced online learning higher education had to endure. In recent research, this phenomenon has been labeled, emergency response teaching. As defined by Hodges et al. (2022), emergency response teaching “... is a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances. It involves the use of fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses and that will return to that format once the crisis or emergency has abated” (p.6). In other words, the emergency response teaching transition is a temporary solution that rescued almost two years of learning for students and faculty. Without the sharp transition to emergency response teaching, the education system would not have been as successful; I argue that education would have stopped until the pandemic was more manageable.

Regardless of which type of online learning people are discussing, the criticism regarding online learning is vast. “Online learning carries a stigma of being lower quality than face-to-face learning, despite research showing otherwise” (Hodges et al, 2022, p. 2). One reason online is perceived lower quality is due to the cost associated online learning. “The data are sometimes estimates, with a noted tendency to underestimate actual costs. For example, developing online learning resources tends to take longer and cost more than expected.” (Means et al., 2014, p. 171). Preparing and managing an online class is more expensive than expected. For example, Newton (2018) reported Arizona State University charged Arizona residents were charged more for online classes than for in-person classes because of the increasing cost of “online instruction and support service,” “online course and program development,” and “online program

marketing.” Though the financial costs are invisible, the cost of online instruction is heavy on the faculty and administrators.

Face-to-face (F2F) instruction is “... when the instructor and the students ... are in a place devoted to instruction and the teaching and learning take place at the same time” (Purdue University, n.d.). The instruction typically happens without mediation; the instructor and the students are connecting F2F. This has been the primary standard for instruction in most educational settings, especially in universities. This section will provide more information regarding F2F and explain reasons why others may prefer it.

At the end of the 2019-2020 academic year, 97% of college students reported that their courses had switched to online instruction (Simpson Scarborough, 2020). Students were concerned with this transition. College students were critical of online instruction before the pandemic (Simpson Scarborough, 2020). Unfortunately, the attitudes have not changed; negative attitudes toward online instruction have increased. Simpson Scarborough (2020) reported that 63% of college students feel online instruction is worse than in-person learning. However, Beschloss (n.d.) reported 77% of college students to say remote learning is worse than in-person classes. Currently, students are “paying big prices for an educational product that has historically cost significantly less and some believe is less valuable” (CNBC Make It, 2020). The students and their families are paying for a product they would not have selected under normal conditions; however, educators, students, and their families realized that the learning that took place during this time was not ideal circumstances for online learning.

Many students and professors alike believe that idea sharing and discussion are hard to do remotely. Jeremy Pressman, associate professor of political science at the

University of Connecticut, stated he prefers F2F instruction, because “... that feeling of, especially in a small seminar, when things click between the group, including the faculty member, but also the students, is something difficult to replicate online” (CNBC Make It, 2020). In other words, the lack of F2F makes discovering knowledge challenging.

Though professors and students may prefer F2F instruction over online instruction, that does not mean that F2F instruction is better than online instruction. Jagers (2014) mentioned that “although most students in our study preferred to enroll in face-to-face sections for certain courses, that does not necessarily imply that they were always pleased with the quality of learning in their face-to-face courses” (p. 36). In other words, F2F instruction has challenges for professors and students as well. One challenge for example, especially with first-year students, is the transition from high school to college. Through my meetings with first-year students, they are surprised that faculty do not have the same teaching ideologies as the teachers in high school. I have heard countless times that students state “my professor doesn’t teach me anything” or “aren’t they supposed to make sure that I understand what’s going on?”.

Experiencing F2F instruction is not specifically tied to classroom, but also the support students need to be successful. The university is a sanctuary for students to learn about themselves as well to separate from unhealthy situations. “For many students, access to campus resources, even if limited, is essential for pursuing their studies” (Czerniewicz et al., 2020, p. 957). For example, students who may be experiencing home or food insecurity relied on the university services to ease those insecurities. The pandemic made receiving those resources F2F challenging.

Theoretical Framework

To better understand these frameworks, I will share how I will define them and how they could emerge in my research.

Attribution Theory

Attribution theory examines those factors and predicts what the outcomes may be. In other words, attribution theory "...explains how people view the causes of their behavior and those of others..." (Schunk, 2012, p. 266). The attributes help not only with evaluation of actions but also the reasoning behind the actions. Schunk (2012) stated attributions impact one's opinions, feelings, and actions. In other words, goals are good, but the reasons behind those goals can have a greater impact on students' actions in the classroom, especially during the pandemic. A central component of attribution theory is the locus of control, which could be internal or external. For example, a student may think they received a good grade on an exam because they spent several hours studying (internal) or had a mentoring relationship with the professor (external).

Self-efficacy Theory

While attribution theory predicts outcomes, self-efficacy focuses on the student's belief of executing to get a desired outcome while evaluating the outcome as a success or failure. Bandura (1978) stated, "Efficacy expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences. The stronger the perceived self-efficacy, the more active the efforts" (p. 141). Self-efficacy is about whether a student can complete an assignment or task; the student may have the skillset and resources to complete the task, but the focal point is whether they can see the task through. Bandura (1978) listed the significant self-efficacy

tenets: performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal.

The first tenet is performance accomplishment. When a student completes a task successfully, they are more likely to believe they can do it again with the previously used tools and strategies. The pivot to virtual learning in March 2020 may have shaken some students. However, those with high self-efficacy were more likely to use different strategies to complete the semester. Schunk (2012) confirmed, “high-ability students feel more efficacious about learning compared with low-ability students...” (p. 146). For example, in Fall 2020, students may have been apprehensive about starting a semester virtually; however, if they completed the semester satisfactorily, they were more likely to enroll again the following semester. Bandura (1978) stated that “...self-efficacy is, in turn, linked to behavior” (p. 144). For a student, self-efficacy translates the beliefs of success into actionable steps to success.

The second tenet of self-efficacy is vicarious experience. Bandura (1978) stated that vicarious experiences are a “... less dependable source of information about one’s capabilities than is direct evidence of personal accomplishments” (p. 145). However, vicarious experiences can help jump-start the necessary behaviors because students can see them. For example, in an in-person summer bridge program experience, facilitators and student leaders are familiar with modeling successful behaviors at the institution; in a remote summer bridge program, everyone is learning how to navigate the environment, so best practices are learned in real-time by the facilitators, student leaders, and summer bridge program participants simultaneously.

Another tenet is verbal persuasion. Bandura (1978) stated that verbal persuasion strives to improve outcomes, helping students shift their perspective of work rather than improving self-efficacy. When professors give feedback on an assignment, the feedback helps the students' behaviors, but it may not help with the student's belief in getting the desired outcomes. Bandura (1986) stated, "Feedback is not 'reinforcing' anything; it simply tells subjects where to set their next estimate" (p. 363). Summer bridge program is helpful because students can receive feedback when the stakes are not tied directly to a course grade. Students start to remove the sting of getting negative feedback and learn to use that to help them get their desired outcomes.

Emotional arousal is the final tenet of self-efficacy. If behavior is linked to self-efficacy, then how students feel about their task and likely outcome is important. Bandura (1978) said, "[emotional arousal can impact] how the environment is likely to be perceived" (p. 146). For example, students (along with faculty and staff) could have negative attitudes to online learning. However, several external factors were paired with online learning. Schunck (2012) articulated that self-efficacy on a task change due to internal factors, like physical and mental health, and external factors, like the COVID-19 pandemic, social and civil unrest, and an insurrection. Bandura (1978) further explained, "...the informational and motivational effects of arousal are treated as interdependent rather than as separate events" (p. 147). The online learning was a factor of student stress, but not the whole problem; it was an attempt at a solution. When learners notice they are experiencing more stress in response to academic demands, they may feel less productive in mastering the task (Schunck, 2012). Students may attribute their stress solely to online learning, but other factors may play a role. Student persistence and graduation at a higher

education institution is a collaboration of many attributes. Attribution theory examines students' attributes and how students perceive their success based on those attributes. Schunk (2012) explained that "attributions are important because they influence beliefs, emotions, and behaviors" (p. 367). In other words, students' perception of their success can be framed by things within their control or internal attributions, like the number of hours studying or completing an assignment, and outside of their control or external attributions, like forced online learning in March 2020.

Resilience

In March 2020, students' worlds were rattled when remote learning became an unfamiliar yet necessary requirement. However, despite that unfamiliarity, students had to calibrate to their baseline, adjusting to their new normal, despite not knowing the duration of online learning. The student's ability to adjust is an example of their resilience. Garmezy (1991b) defined resilience as the ability to bounce back and recover. Students had many opportunities to review their resilience during the 2020-2021 and 2021-2022 academic years.

One of the first tenets of resilience is that a stressor must be present to measure resilience. The student can measure the quality of the stressor. Students are experiencing the stressors of college and a larger stressor, a pandemic; both stressors can pivotally impact students. Masten et al. (2003) said individuals encountering massive trauma and stressors can experience adversity in crippling proportions. The adversity, like the pandemic and other events, shattered students' plans, and dreams for their college experience. Raghunathan et al. (2021) built upon Masten et al. (2003) by saying resilience studies "... seem to start with disruption and return to normalcy and have

helped many natural systems survive over the years” (p. 3). The pandemic and other heavy events devastated students because students were dealing with multiple stressors simultaneously. Herrman et al. (2011) stated that resilience “... is an interactive concept, referring to a relative resistance to environmental risk experiences, or the overcoming of stress or adversity...” (p. 262). In other words, students had to find ways to navigate through this hard pivot to virtual, and the students chose the best ways to return to their previous baseline.

Another tenet of resilience is that it is not just one action but a series of actions. Masten et al. (2003) stated that “...resilience is a description of a general pattern, whereas diagnosis occurs when the individual is matched to the pattern” (p. 4). For example, a student showing up to their one Zoom class may not measure resilience, but the same student attending class consistently or the day after a civil disturbance, like the insurrection in January 2021, maybe a better measure of resilience.

The third tenant is that resilience does not eliminate stressors. Ideally, having resilience would eliminate or reduce stressors in students’ worlds; however, “[being] resilient or adaptive does not imply immunity to negative live events” (Garmezy, 1991, p. 460). In other words, resilience provides a layer of armor for students to resist a stressor’s impact on their performance. Masten et al. (2003) highlighted Masten’s idea of ordinary magic. Ordinary magic “...refers to the idea that human individuals are capable of astonishing resistance, coping, recovery, and success in the face of adversity, equipped only with the usual human adaptational capabilities and resources, functioning normally” (Masten et al., 2003, p. 15). Students displayed their ordinary magic by navigating

through online learning. Additionally, participating in remote summer bridge programs was enough to expose and increase their resilience.

Lastly, resilience is not a defining or predicting factor. Resilience is important for students, but it is not all-encompassing because resilience is a compilation of actions. “Resilience is not a trait of an individual, though individuals manifest resilience in their behavior and life patterns” (Masten et al., 2003, p. 4). Again, students are building their resistance to stressors by pushing through and experiencing challenging events, like college or college online. Resilience shows how likely students are to push through work challenges, but resilience will not push someone to the front of the line to success.

Students are not building resilience in a vacuum. Instead, what they learn in the online classroom is complemented by what they learn outside. “Planfulness future motivation, autonomy, and adult support outside the family appeared to be the indicators that predict the emergence of resilience over the transition to adulthood ...” (Masten et al., 2004, p. 1091). This explanation could be why our students are retained better overall. Liu et al. (2017) saw resilience as “...a trajectory of coping that defies the expectation of negative outcomes” (p. 111). In other words, resilience does not measure if the student will be destined for success or not have any more stressors in the future.

Sense of Belonging

The last theoretical framework examined within my research is sense of belonging. Sense of belonging is a “... students’ perceived social support on campus, a feeling or sensation of connectedness, and the experience of mattering or feeling cared about, accepted, respected, valued by, and important to the campus community or others on campus such as faculty, staff, and peers” (Strayhorn, 2019, p. 4). In other words, the

student defines whether they feel a part of the institution's community. Strayhorn states that sense of belonging is critical part of motivation that supports a student's college experience. (Strayhorn, 2019). When a student feels as if they belong to the college community, the student may be motivated to perform certain behaviors, like attending class or studying for a test. To further understand sense of belonging, I will discuss the tenets in more detail.

The first tenet is understanding that sense of belonging is a requirement for not just students but everyone. Strayhorn (2019) explains that sense of belonging is a component of students' participation at the institution, higher education professional need to facilitate sense of belonging to students. An example of facilitating the sense of belonging for students would be summer bridge programs. These programs not only create the belonging for students but also help them.

The second tenet is that sense of belonging is a motive that is enough to drive action (Strayhorn, 2019). Strayhorn states the "... need to belong does not always compel individuals to act in ways that are prosocial or productive" (p. 32). In other words, staying at the institution for students to graduate may not be the primary focus; a student may be motivated to stay to be social and interact with other students. The motive may not be negative until it impacts the student's ability to participate and attend class.

The context, time, and factors are defining elements of sense of belonging is the third tenet. Strayhorn (2019) stated "... college students face serious difficulty in attending to the tasks at hand like studying, learning, and retaining information until they resolve one of their most fundamental needs—a need to belong in learning spaces" (p.

34). The pandemic largely impacted students need to participate and belong in those space. Gopalan et al. (2022) found that sense of belonging is a pivotal predictor of a student's mental health. With the strain of the pandemic, civil unrest, etc., impacting students of color at disproportionate rates than White students (Landertinger et al., 2021), the collective stressors raised the importance of having a sense of belonging with a higher education institution. Strayhorn (2019) discusses that a strong sense of belonging may reduce the calling from home responsibilities. While summer bridge programs nurture the sense of belonging, the challenge to lean into belonging at the university while learning remotely with home responsibilities in front of a student's face may have been hard.

The fourth tenet is that sense of belonging is connected to mattering. Strayhorn (2019) stated that a student "...must believe one cares" (p. 36). Faculty and staff must show that they care about the student. Though summer bridge is a great foundation for sense of belonging, the university cannot rely on it solely for the academic year. If universities do not build upon the support created during summer bridge, the benefits of the program may decrease (Strayhorn, 2019). In other words, institutions must continuously pour support into the student for them to feel as if they belong at the institution.

A student's social identity can impact a students' sense of belonging is the fifth tenant. Strayhorn (2019) stated that true belonging for a student is not fitting in but shining as their authentic self. At predominately White institutions, underrepresented minority students have barriers bringing their whole self, thus experiencing challenges belonging with their institution. Strayhorn (2019) identified that students of color and

White students may have different experiences in academic preparedness. The challenges with underrepresented minority students' academic preparation impact their sense of belonging. Gopalan et al. (2022) reported underrepresented minority and first-generation students having lower sense of belonging. The lower sense of belonging as identified by the other tenets can impact students' success at the institution.

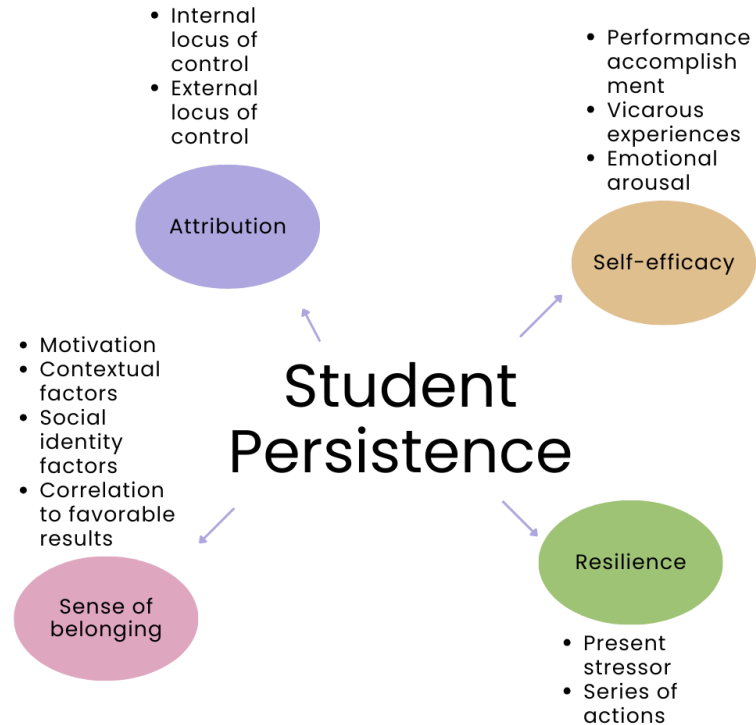
The last tenet is the correlation to sense of belonging and other favorable results. When students feel a strong sense of belonging, students can feel a stronger connection to campus and hopefully, graduate. Freeman et al. (2010) found that a higher sense of belonging impacted student's efficacy. If students felt like they belonged, they can be more efficacious and resilient in class. In another study, Xu et al. (2018) reported that importance sense of belonging impacted underrepresented minority students who participated in a living learning community. Students could have positive attributes regarding their experience with a higher sense of belonging. In other words, sense of belonging can provide advantageous foundation to the other theoretical frameworks.

Since the theoretical frameworks of attribution theory, self-efficacy theory, resilience, and sense of belonging, I will show how I plan to use them to support my dissertation. I have mapped out my theoretical framework in Figure 1.1. For each of the theoretical frameworks presented, I will apply one or more tenets to refine the lens the study and results will be examined. Summer bridge participants' persistence has many as the students examined would have faced remote experiences through the COVID-19 pandemic. For attribution theory, internal and external locus of control will be examined. Performance accomplishment, vicarious experiences, and emotional arousal will be utilized from self-efficacy theory. Present stressor and series of actions will be used from

resilience theory. Lastly, sense of belonging tenets used are motivation, contextual factors, social identity factors, and correlation o favorable results.

Figure 1.1

Conceptual Map of Theoretical Framework



Attribution, resilience, self-efficacy, and sense of belonging theoretical frameworks will create the perception of student persistence; this view of student persistence will be used to observe students' behaviors and retention at the institution.

Specific Research Questions

My main research question is, how do summer bridge programs' initiatives, goals, and outcomes translate in a virtual environment? To explore this issue, I plan to address these questions:

- Were the first-year students who participated in the remote summer bridge program in July 2020 and July 2021 retained more than students who participated in an in-person summer bridge program in July 2018 and July 2019?
- Did the first-year remote summer bridge program participants in July 2020 or July 2021 perform academically on par or better than the July 2018 and July 2019 in-person cohort?
- Other than GPA and retention, how did the remote summer bridge program impact participants on an academic level?
- How did remote summer bridge impact students at a personal level?
- What were the experiences of summer bridge participants at a social level? Did students have a sense of belonging at the institution?
- Did the students believe they could complete their first semester and their first year at the institution? What were the internal and external attributes of their assessment?

Significance

Now, my dissertation research has a significance that may transcend solely studying the pandemic and remote learning. The significance will be divided into two categories: online learning is not going anywhere any time soon, and the response and examination of a unique contextual challenge and contribution to the empirical evidence and importance of summer bridge programs.

First, in fall 2019, the semester before the pandemic and shelter-in-place orders, 36.3% of undergraduate students were enrolled in at least one online course (National Center for Education Statistics, n.d.). The availability of online classes was limited.

However, at the end of the 2019-2020 academic year, 97% of college students reported that their courses had switched to online instruction (Simpson Scarborough, 2020). In 2021, 60% of undergraduate students took at least one class online during their academic year (NCES, 2022). Online learning is an attractive concept for university students and faculty. Miller (2011) explained, “[this] evolution is both a technological push and a student pull” (p. 448). Students are surrounded with technology and resources to work differently, and faculty must catch up with what is available. Online learning can assist in a pedagogical paradigm shift. Means et al. (2014) stated, “[moving] a course online can be an opportunity to move toward a much more learner-centered, research-based pedagogy” (p. 153). In other words, the students are more of a focal point and a contributor to the online learning environment.

Lastly, in my research, I will examine empirical evidence of summer bridge programs. Summer bridge programs are extremely important, not only because of the demographics that they serve but also the sense of belonging that they create for these students, especially at a predominately White institution. Sablan (2014) noted that a “... major gap in [summer bridge program] research is the lack of comparison groups and comparative studies ...” (p. 1046). This research could provide empirical evidence that supports summer bridge programs’ effectiveness, whether in person or remote. Furthermore, they can illuminate how these programs influence educational policies and practices. Examining this cohort of students and seeing ways that they defy the odds, retain, and continue, and hopefully graduate, we can then think of ways that we could do this on a larger scale—granted that the institution has financial and other resources to support offices that do this necessary work. Without the evidence to support the need for

summer bridge programs, it might be hard to get that resort result. The need to provide evidence for summer bridge programs explains why a transformative approach is beneficial because this approach attacks and tackles that problem regarding policies and practices, especially in higher education.

CHAPTER TWO

LITERATURE REVIEW

Overview of Transition Programs

Defining Transition Programs

Colleges have taken on the responsibility of equalizing the student experience before enrolling in the academic year. Transition programs have the institution invested in these students' success while providing a more stable foundation upon experiencing the institution. "Transition programs in their various forms are nothing new to higher education and are recognized as one of the oldest forms of channeling at-risk, under-prepared, and under-represented students toward college success." (Slade et al., 2015, p. 125). Transition programs are typically targeted at high school students who are entering college for the first time (FTIAC); the objective of a transition program is to "...assist in a student's transition to an academic institution by providing academic and social assistance" (Smith, 2020, p. 1). Each institution provides support, primarily academic and social, unique to the institution's demands and available resources.

Transition programs help students who were not academically prepared before college, especially in high school. At the end of their high school experience, many students were unsure about where they were transitioning, especially in higher education. Transition programs may address how institutions have underprepared underrepresented minority students in different ways. Smith (2020) stated, "...[some] students may need supplemental resources to review key concepts, while other students may simply want to enter into new majors that they did not foresee entering upon graduation from high

school” (p. 1). Typically, the academic support is focused on math, reading, or writing comprehension. For example, some may provide a review of writing concepts for the upcoming course all first-year students have to take.

Different Types of Transition Programs

There are many types of transition programs. Many transition programs target a specific demographic that may need additional support. For example, the University of Michigan-Dearborn has a Transitions program that is “open to female returning undergraduate, transfer and graduate students ages 25+ in their first semester at UM-Dearborn” (Transitions Program, n.d.). Some transition programs assist in preparing students for upcoming barriers. The University of Delaware has a transition program where students with disabilities receive tools and tips for adult life post-college (University of Delaware, n.d.). Overall, transition programs are designed to reduce uncertainty for the students and help students to the next part.

However, the research I collected for this review will focus on summer bridge programs. Summer bridge programs “...programs are provided for high school students entering college...” (Smith, 2020, p.1). Summer bridge programs have targeted transition programs for incoming first-year students, inviting students to interact with a campus the summer before the fall semester. Summer bridge programs provide students an opportunity to build skills to succeed at the institution and in their respective majors or fields (Sablan, 2014; Brooks, 2020). Summer bridge programs also help students connect with staff and faculty who complement their efforts at the university.

Many of those targeted populations are recruited first-generation, low-income, underrepresented minorities, etc. “To increase access and diversity within the college

campus, various support programs have been developed for underrepresented, low-income, and first-generation students” (Turner, McCallum, Benson, 2020). The participants may have been selected due to the results of their placement tests for specific courses, like math or writing. During a student’s onboarding to the university, they must take a placement test. The placement test enrolls students in classes that meet their academic preparation. “[I]f a student fails one of the initial placement or skills tests, that student has the option of attending a summer bridge program that offers intensive or accelerated instruction in that skill area (most frequently in math)” (Douglas and Attewell, 2014, p. 104). After the summer bridge program, students may retake the placement test, placing them in a course directly tied to their degree progression instead of an extra remedial course.

The student’s participation may be voluntary or required because of academic criteria, such as low or no standardized test score, being conditionally admitted, or enrolling in remedial (or gatekeeping) courses. summer bridge program participation may even be tied to a specific major, like engineering or computer science. With many students hesitant and unsure of the college experience, summer bridge program will be crucial for student’s academic, financial, and social survival.

The Goals of Summer Bridge Programs

Once selected to participate in summer bridge program, students get a simulation of what the college experience may be for them. Summer bridge programs are “... are designed to assist in a student’s transition to an academic institution by providing academic and social assistance” (Smith, 2020, p.1). For example, many summer bridge programs have pre- and post-tests to show the program’s impact on the students

quantitatively. Douglas and Attewell (2014) argue that the placement test and foundational coursework are related to the summer bridge program's success. The pre- and post-tests show how students performed during the program. The summer bridge program not only provides the tools necessary for the students to survive at the institution, but summer bridge program also mimics what the first-year students will experience throughout the academic year. "... The summer program provided supplemental instruction ..., students were provided coaching, mentoring, and other support services, along with a living-learning community that built a stronger culture of peer self-help and collaboration" (St. John et al., 2014, p. 1061). The workshop participants complete in summer bridge program may show up during their time at the institution. With summer bridge program imitating semesters, "...bridge programs appear on student transcripts as actual courses taken with grades, even if these do not bear credit toward the degree" (Douglas and Attewell, 2014, p. 92). Overall, students are rewarded with a sneak peek into college through key people at the institution.

The academic preparation or course could be for credit or non-credit. For example, Eblen-Zayas and Russell (2019) reported that student participants "... earned 6 credits for completion of the entire [program] ..., and there was no cost to students to participate" (p. 104). Students are not only preparing for the classroom but preparing for the unwritten rules of the college.

Though summer bridge programs helped lay a successful foundation for students who may have a hard time, summer bridge programs are also designed to increase access and assist with retention and graduation. Brooks (2020) defines retention as "... the rate at which post-secondary institutions keep their students enrolled and graduate their

students” (p. 1). Retention could be measured in different ways. For example, an institution may want to examine the retention between two academic semesters or academic years. Bir and Myrick (2015) found that summer bridge program participants are retained at higher rates and receive higher GPAs than non-participants. In other words, students who could have been summer bridge program participants did not stay at the institution as long or graduated as those who participated. Many summer bridge program programs continue their intentional connection with students throughout their time at the institution. Through the participants’ first year at the institution, they may receive mentoring through peers or professional staff. Overall, “the more higher education institutions understand about their students, the more successful they may be in not only retaining students but also in creating an environment for student success.” (Brooks, 2020, p. 3). In other words, because those students are engaged with the institution through summer bridge program from the beginning, university staff and administration could do their best to remove historical barriers to ensure the participants’ retention and graduation.

Summer bridge programs are used as a retention and graduation strategy for students who may be underserved academically and historically at the institution. However, the antithesis also needs to be examined when discussing underrepresented minority students and their progress. Student attrition is “... the rate at which students leave college without completing a degree” (Brooks, 2020, p. 1). Students are juggling a lot, especially underrepresented minority students while attending college. Many of the struggles range from finding employment, budgeting for their education, or existing on campus as an underrepresented minority student (Brooks, 2020). The pandemic exposed

these struggles and others that heightened during the COVID-19 pandemic. For example, first-year students may have been at home learning during this time, but their responsibilities increased. Coe et al. (2022) stated, “many [students] have already taken on adult responsibilities as they start climate movements, lead social justice marches, and drive companies to align more closely with their values” (p. 7). The students already deal with very heavy adult themes thanks to the pandemic, such as childcare, bills, mental and physical health, etc. Along with other external factors, students left the institution unsure whether they would return.

Impact of Summer Bridge Programs

Overall, there is a positive correlation between summer bridge program and academic preparation delivery. Strayhorn (2011) stated that summer bridge programs “... positively influenced such students’ academic self-efficacy and academic skills” (p. 153). Students not only believe they can do the task, but they can see themselves past the task. For example, a summer bridge program participant can push through their first-year writing course because they know they have completed a similar assignment; the participant also sees themselves applying in the next-level writing class and major courses. “If students’ academic self-efficacy beliefs are altered as a result of [summer bridge program] participation, ... then [summer bridge program] participation may influence first semester GPA by raising one’s academic confidence” (Strayhorn, 2011, p. 154). Summer bridge program can undo the lack of preparation provided to the participants before college, but it can help seal the cracks in the foundation.

Social connections, especially for underrepresented minority students, are vital to their success. “Academic and social support can come in the form of peer-to-peer support

groups, faculty-to-student support groups, or group/community support groups” (Smith, 2020, p.1). The relationships cultivated can help students have a larger sense of belonging. summer bridge program can help students learn to create connections. For example, if a summer bridge program participant is working on a project, they may be placed in a group away from friends they came into the program with. Learning to push through that uncomfortable feeling is helpful when it may not be the same group project but maybe a different section of a class or other major altogether. “This social aspect is clearly the foundation upon which students build their support network and forge relationships that will sustain them through their undergraduate careers and beyond.” (Stolle-McAllister, 2011, p. 20). In other words, navigating relationships that will help their success in class and maybe professionally will be an excellent tool for students.

Executing a summer bridge program has many moving parts under traditional circumstances, but with a pandemic forcing remote learning, the execution must be changed while the program works. Howland Cummings et al. (2022) discussed the implementation and facilitation of STEM summer bridge program in 2019-2021, the peak years during the COVID-19 pandemic. Howland Cummings et al. acknowledged that not only student retention, but students overall are going to be unique during this time. “The difference in retention rates for the 2019 cohort is of particular interest as the pandemic disrupted the spring semester and led to significant learning losses and disengagement campus-wide” (Howland Cummings et al., 2022, p. 8-9). In other words, the students who participated in their summer bridge program in 2019 were unprepared for the learning environment shift. However, the summer bridge program supported students in pursuing their education during those tough times. The community building was

essential; though at home part of the 2019-2020 academic year, Howland Cummings et al. (2022) noted “...both in-person (2019/2021) and remote delivery (2020), these programs lessened feelings of isolation for students, whether they entered physical classrooms or online ones, because these programs emphasized connecting with their new community” (p. 14). Regardless of the delivery or what is happening externally, students felt supported during their transition into college.

However, though summer bridge programs successfully adjust students to higher education, there are individual and broad challenges for summer bridge programs. Sablan (2014) highlighted a few of those challenges. One challenge is “... many of these programs largely situated in student affairs domains...” (Sablan, 2014, p. 1039). In other words, many summer bridge programs are facilitated by the higher education departments that support students in the classroom but may not be the staff they interact with frequently in the classroom. The benefit of student affairs facilitating many summer bridge programs is another challenge; summer bridge programs are to assist with these students’ college readiness. Lastly, Sablan identified that “...no attention seems to be given in the summer bridge program literature despite the variations in time, both in total duration of program and time allocated to various activities” (Sablan, 2014, p. 1039). The average summer bridge program Sablan reviewed was 4-6 weeks. However, some summer bridge programs are as short as four to nine days. The varying duration of summer bridge programs can impact how students adjust to the institution and how the institution can learn how to assist the cohort. The summer bridge program is as unique as the department and institution facilitating it.

The evidence found in Sablan's (2014) study is in other studies. Ashley et al. (2017) echoed Sablan's (2014) sentiments when discussing summer bridge programs and the impact COVID-19 had on them. "There are many moving parts in the development of a successful bridge program, and it is quite possible that first iterations of programs will not be successful in meeting those programs' goals" (Ashley et al., 2017, p. 13). In other words, summer bridge programs before and after 2020 should be evaluated differently because of the external impact COVID-19 had on higher education institutions. Furthermore, summer bridge programs in 2020 and 2021 should be evaluated slightly differently because of the emergency pivot institutions had to make in 2020 and the variety of programming (some in-person and some virtual) in 2021.

Underrepresented Minority Students and Summer Bridge Programs

Transition programs support the students in staying and thriving at the institution. Transition programs also provide social support outside the classroom. "[Students need to] have access to resources to assist them with being away from home, adjusting to college life and independence, and completing coursework" (Smith, 2020, p.1). In other words, student success does not happen in a classroom vacuum.

Many transition program participants may feel they do not belong, especially at a predominately white institution. Douglas and Attewell (2014) stated, "...[Black] and Hispanic students, ...are less academically prepared ..." (p. 100). During transition programs, "students are able to discuss challenges and areas of concern with those who share their experiences" (Smith, 2020, p.1). Students need to feel that they can complete the task and feel supported while completing it. In many cases, social support can help students push through the challenges of academics.

However, institutions benefit from these programs as well in the long term. Retention of students is essential; however, the retention statistics support this because intrusive interventions, like summer bridge program, are imperative. The institution encourages "...advocacy for equity, as well as in efforts to document the effects of different types of interventions like bridge programs" (St. John et al., 2014, p. 1060). In other words, universities can not only retain students but work on the barriers that prevent students from being successful. Higher education institutions also need to get to the root of and minimize these barriers for their underrepresented minority students. St. John et al. (2014) expresses that those institutions "... need to better understand how to engage in these processes while maintaining the integrity of research used to inform reform" (p. 1061). Through the intentional program and institutional support, these programs can be helpful to the enrollment of historically underrepresented populations.

Institutions are minimizing these barriers and finding ways to integrate underrepresented minority students better. underrepresented minority students are far from decreasing the gap between them and White students at PWIs. For example, in Oakland University's Office of Institutional Research and Assessment, 13.4% of students self-identified as underrepresented minority students and 72.4% of the student population identified as White (n.d.). These statistics are not surprising because they mirror many other PWIs in the United States. Gale (2020) identified that the systemic issues in higher education are a microcosm of the world these students will experience. However, while at college, the goal is "...for all social groups to benefit from the world's social, cultural, and material resources, in ways that develop their capabilities to live lives that they value" (Gale, 2020, p. 1). In other words, despite this harsh reality that underrepresented

minority students may face, higher education institutions should be inclusive academic utopias where everyone can succeed without systemic barriers. Even though this may not be a reality, summer bridge programs can facilitate that reality, even if it is just for a few weeks in the summer.

Delivery of Summer Bridge Programs

In-Person as Classes

One of the main components of summer bridge programs is the academic component. Students are typically greeted with a pre-test. The pre-test does not have any bearing on the student's course selection; the pre-test is used as a benchmark to see the student's skills at the program's beginning. The pre-tests will typically be in the courses the students will take throughout the summer bridge program. For example, if there is a math academic component, there will be a math pre-test with material that may be presented during the program.

Based on the pre-tests, instructors can focus on where students need the most support. The courses resemble college courses. Students experience the appropriate norms of taking a lecture-style course while getting assistance in the subject area. In other programs, students are on a schedule that requires attendance; lack of participation in academic components could result in a student's dismissal from the program.

There may be academic benchmarks throughout the program; however, students will typically take a post-test at the end of the program. The post-test may resemble the pre-test; having the tests be similar will allow the instructors and summer bridge program facilitators to see where students improved during the program. Hopefully, the student felt a slight push towards believing they could manage an academic course.

Summer bridge programs prepare students throughout the duration with course preparation, typically in reading, writing, and math. The focus on these three areas is primarily because underrepresented minority students are in remedial or gatekeeping levels of these subjects. Washington et al. (2016) stated, “[r]ecent research suggests that too few students advance from traditional developmental courses to college-level courses, which increases the pressure on colleges to identify and scale-up successful developmental education initiatives” (p. 171). Without the intentional preparation of summer bridge program, the university may not retain or graduate many underrepresented minority students.

In recent years with the desire to increase diversity in science, technology, engineering, and math (STEM) fields and the overall rise of STEM-focused curriculums (St. John et al., 2014), many institutions have targeted their efforts with math courses. Other institutions may focus on overall academic preparation.

While reviewing tactics for preparing for the academic demands of the institution, summer bridge program participants also get support for major and upcoming desired career exploration. For example, a summer bridge program major and career exploration activity could be a personality assessment or an assignment discussing ideas about their chosen field. The academics help students get in the door professionally; however, the social skills students learn in summer bridge program help them stay professional.

In-Person as an Event

As previously stated, summer bridge programs are not just focused on preparation and execution for the classroom but also the other skills, like how to make and maintain relationships. “Academic behaviors and habits are developed through program structure,

while the social components ... are addressed through collaborations with other college units and modeled by program faculty and staff” (Slade et al., 2015, p. 127). summer bridge program participants are getting examples of exploring social connections all over. “[Summer bridge program] allow students to take courses and engage in learning and note-taking sessions, while building social networks among their peers and learning about different social resources at the institution.” (Smith, 2020, p. 1). Smith (2020) highlights students are constantly making social connections – maybe even more than studying for their next exam or writing a paper.

Because social interactions are embedded in almost every aspect of the college experience, students also need to prioritize socialization. White et al. (2011) expressed the importance of developing socially “... because their existing social support will not be available or they may not be knowledgeable about the higher education environment” (p. 9). In other words, summer bridge program students may need to add to their support system because they may not understand the unique challenges of the specific institution they are attending or higher education. The social support participants create within summer bridge program can help them later when they may be “...feeling like they do not belong in certain settings. Through social support, students are able to discuss challenges and areas of concern with those who share their experiences.” (Smith, 2020, p.1). The support can help them not just stay at an institution but also graduate.

The social support cultivated during summer bridge program is not just for navigating campus resources; social support provides a lot to the college experience. Smith (2020) describes social support as “... the emotional and motivational support provided to students. ...[F]or students to be successful, it is key for them to have access

to resources to assist them with being away from home, adjusting to college life and independence...” (p.1). For example, a Black female student inquiring about where the nearest beauty supply store or asking for hair recommendations would be an example of the social support needed for some underrepresented minority students.

The Introduction of Online Delivery

There is little research that critically explores an online execution of a summer bridge program. Jura & Gerhardt (2021) expressed the importance of reviewing online summer bridge programs, “...particularly as the COVID-19 crisis has further illustrated to colleges and universities the importance of providing quality bridge and similar remote and online courses” (p. 8). Hopefully, my research will provide a critical analysis and a suggested plan in case institutions want to explore an online component of their program. In recent years, the discourse regarding online delivery has been related to the pandemic.

Before the pandemic, there were limited options for online courses or degree programs, and summer bridge programs were few and far between. Jura and Gerhardt (2021) and Eblen-Zayas and Russell (2019) discussed online summer bridge programs and how they are facilitated differently than in-person summer bridge programs.

Remote learning was not introduced during the COVID-19 pandemic in 2020; many institutions and summer bridge programs were experimenting with this concept. Jura and Gerhardt (2021) explored the execution of an online summer bridge program focusing on preparation for calculus at Manhattan College in 2013. “The online nature of the course opens it up to as wide of an audience as possible” (Jura and Gerhardt, 2021, p. 6). In other words, students who could not participate for various reasons could work

with the right technology. The summer bridge program facilitated support in a calculus course that could allow students to be better prepared for the upcoming academic year.

Overall, the reported summer bridge program and the calculus course had positive outcomes. “[The calculus course] successfully completes the bridge to Calculus for students in a nearly cost-free way while allowing them to not have to spend extra money on summer classes later in order to catch up with their programs of study” (Jura and Gerhardt, 2021, p. 8). In other words, the calculus course during the summer bridge program provided a better foundation than those who completed pre-calculus in the fall. The study displays how remote learning can be comparable in bridging gaps in knowledge and understanding. The techniques are not identical because the in-person and online environments are different. The height of the COVID-19 pandemic “...further illustrated to colleges and universities the importance of providing quality bridge and similar remote and online courses” (Jura and Gerhardt, 2021, p. 8). In other words, the virtual summer bridge program may have been a gimmick to get students at their respective institutions, but now, having the effective execution of an online summer bridge program may be a required contingency plan.

Months before the first COVID-19 case, Eblen-Zayas and Russell (2019) facilitated a high-touch online summer bridge program. Their summer bridge program was “...a hybrid program to achieve many of the goals of a traditional summer bridge program, but with a flexible implementation that allowed students to remain at home to meet employment or family obligations” (Eblen-Zayas and Russell, 2019, p. 104). Eblen-Zayas and Russell treated the summer bridge program more like a highway than a toll bridge; students collected six credits for completion, specifically in math, at no cost

to the student (Eblen-Zayas and Russell, 2019). The high-touch aspects of the program came through connecting students with faculty and campus support. “Although the program was designed with a largely asynchronous and flexible schedule to accommodate work and family responsibilities of students, there were two synchronous activities each week designed to build community...” (Eblen-Zayas and Russell, 2019, p. 107). In other words, the asynchronous aspect was tied to assignment completion, but the synchronous parts were focused on academic support and community building.

Both summer bridge programs had several months to prepare for the external distress of a pandemic; both programs were not a result of an emergency pivot; facilitators went into the planning process with the understanding of how the program would be executed. However, summer bridge programs in the summer of 2020 and 2021 did not have that luxury. Months of planning had to be changed quickly. Because of the quick delivery switch, it is vital to establish the difference between online or remote learning and emergency remote teaching (ERT).

Online learning is “[a] form of distance education in which a course or program is intentionally designed in advance to be delivered fully online....” (Bates, 2016). Online learning can be executed synchronously or asynchronously. Also, online learning can have a facilitator leading the lectures or be self-directed by the students. In the fall of 2019, the semester before the pandemic and shelter-in-place orders, 36.3% of undergraduate students were enrolled in at least one online course (National Center for Education Statistics, n.d.). The availability of online classes was limited. However, at the end of the 2019-2020 academic year, 97% of college students reported that their courses had switched to online instruction (Simpson Scarborough, 2020).

On the other hand, ERT is a response tied directly to the pandemic. As defined by Hodges et al. (2022), ERT “... is a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances. It involves the use of fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses and that will return to that format once the crisis or emergency has abated” (p.6). In other words, the ERT transition is a temporary solution that rescued almost two years of learning for students and faculty. ERT was a response to keeping students on track while the world navigated the pandemic. Without the sharp transition to ERT, the education system would not have been as successful; I argue that higher education institutions would have pivoted toward closing or consolidating, leaving students who wanted to pursue a college degree in even more uncertainty.

Stay-at-home orders were beginning to be issued in March 2020. Many institutions had summer bridge programs scheduled to start between June 2020 and August 2020. In other words, these institutions had approximately three to five months to transition from an immersive in-person experience to a comparable online experience. During the aggressive pivot, summer bridge program facilitators had to become innovative in engaging with students, and instructors had to find ways to connect with students. Many turned to studies like Jura and Gerhardt (2021) and Eblen-Zayas and Russell (2019) to see what was feasible for the ERT summer bridge programs.

Summer bridge program facilitators found it challenging to help bridge students to their campuses when the facilitators did not know what they were bridging to. The other challenge was that the universities were unsure how long the stay-at-home orders would go. For a student or their support network, they may have felt that institutions

were preparing for the best and ignoring the worst. Overall, there was a lot of uncertainty, and students, faculty, and staff were unsure how to progress.

Despite the frustrating times during the summer of 2020, students did appreciate the efforts of the summer bridge program facilitators and instructors. Howland Cummings et al. (2022) stated, "... both in-person ... and remote delivery ... [lessened the] feelings of isolation for students, whether they entered physical classrooms or online ones, because these programs emphasized connecting with their new community" (p. 14). In other words, regardless of the environment, the goal-building camaraderie and community in summer bridge programs will happen; the only difference is how the relationships are formed.

If program participants think outside the traditional classroom assignments and settings, summer bridge programs can create new ways to establish a connection with the faculty, staff, and institution. For example, Eblen-Zayas and Russell (2019) intentionally "...designed the online program to provide students a meaningful experience online ...and gave them the flavor of what they would experience once they arrived into a traditional face-to-face college community" (p. 105). For example, during the high-touch online program, Eblen-Zayas and Russell (2019) "... used social media activities to foster connections among participants" (p. 105). Students were already using social media to build connections separate from the academic; bringing them into the classroom will allow the instructor to meet the students where they are in a familiar application.

Underrepresented Minority Students and Delivery of Summer Bridge Programs

One summer bridge deliverable is the connection students build with their friends and the university. Howland Cummings et al. (2022) "...found the most important

elements to be those that helped incoming students connect to each other, to student mentors, and with faculty” (p. 14). Incoming students connecting will help them have friends in classes and help them develop the art of creating and maintaining new friendships. Students may not have done relationship building since high school started; making friends during summer bridge program will be a great refresher for them.

Student mentors are great guides for the summer bridge program participants. The mentors have been in the same place the participants were just a few years ago. Summer bridge program staff can provide a great perspective; however, the student mentors can now show how to navigate college politics. For example, a staff member may advise summer bridge program participants not to take a math course and a science course together in the same semester; however, a student mentor may present it in a way that is palatable for the student. The student mentor could also provide insight into which professors to take.

Lastly, the faculty connections are valuable to the students. Like their high school teachers, faculty can be helpful in the classroom. Cross (2021) found a positive association between underrepresented minority student retention and diverse faculty. Interacting with faculty outside the classroom may be even more beneficial. For example, students who keep in contact with faculty in their desired field. “Students’ needs are becoming a priority for instructors and, thus, universities and colleges are implementing e-learning system in their own training programs” (Al Rawashdeh et al., 2021, p. 116). Summer bridge programs can help to create the faculty-student relationship; if the relationship can be formed directly, at least the summer bridge

program can provide participants the tools to develop that relationship on their own throughout the semester.

However, despite the many challenges forced online summer bridge programs had, participants were still pleased with their experience. Despite not being on campus and having in-person instruction, students still got acclimated to campus and felt connected at the start of the academic year. White et al. (2011) reported “feedback from student participants did not reveal any complaints or concerns about campus familiarity” (p. 11-12). The familiarity of campus is through the connections students make; the physical campus complements those connections.

Students can find connections to campus, especially if the summer bridge program facilitators are intentional with their participants. Eblen-Zayas and Russell (2019) discussed an intentional online summer bridge program. Unlike the emergency pivots done in 2020 and 2021, this program was designed for students to navigate online. Because of this intention, students had a positive view of the program. “Responses from the student participants were overwhelmingly positive, with all students who participated in an evaluation of the program saying they would recommend it to incoming students.” (Eblen-Zayas and Russell, 2019, p. 108). Students can have favorable outcomes when program coordinators can explore the unique benefits of virtual execution. The results can be similarly as positive as an intentionally designed in-person summer bridge program.

The most significant barrier to online instruction is the administration and faculty connections with students. As previously stated, faculty connections are essential for summer bridge program students. Jura and Gerhardt (2021) reported, “...the most

common complaint received was about how students were not able to interact with the instructor in-person” (p. 6). Initially, not having in-person interactions could be negative; however, students have options on how to engage with their instructors. For example, students could connect with their instructors auditorily, without a camera, or via email. There were some positive outcomes to allowing students to interact with staff differently. “Students also prefer what they like and e-learning allows them to prefer subjects they like and enjoy. ...students are independent to select the types of e-learning tools they preferred to use” (Al Rawashdeh et al., 2021, p. 115). Instructors and other college personnel are familiar with in-person experiences.

Delivering a remote experience can help all types of students interact with the material. Castelli and Sarvary (2021) recommended “... providing multiple ways to participate in active learning that does not require sharing video...” (p. 3573). In other words, summer bridge program instructors and facilitators have multiple ways students can be engaged with the lesson. For example, in Zoom, students can participate using audio and visual, with emoticons and the chat feature. In an in-person experience, those comfortable sharing with a large group would have the floor, not leaving much room for those who need longer processing time or are shy. “Offering alternative methods for participation and building an inclusive classroom should help with not causing any student to feel excluded” (Castelli and Sarvary, 2021, p. 3571-3572). With many summer bridge programs focusing on ensuring that underrepresented minority students feel included, participation may have been a way for students to feel excluded without realizing this barrier. Because summer bridge programs have largely been an in-person

experience until the summer of 2020, examining different ways to participate was not on facilitators' radar.

Summer bridge programs, in-person or virtual, will hopefully remove barriers and encourage students to seek connections. However, though students may desire to interact with the professors in person, that does not mean in-person summer bridge program facilitation is better than online facilitation. Jagers (2014) mentioned that "although most students in our study preferred to enroll in face-to-face sections for certain courses, that does not necessarily imply that they were always pleased with the quality of learning in their face-to-face courses" (p. 36). In other words, in-person experience also challenges professors and students. For example, Smith et al. (2017) found that many students did not take advantage of in-person office hours; students were more likely to email their instructor if they had questions (p. 20). In other words, students were not taking advantage of in-person experiences and resources, whether they had access to campus or were forced to learn remotely.

In-person facilitation does not always equal a better method. Barcelona (2009) discussed how institutions could lean into the advantages of online learning. One of the discussions was about how students use technology to assist in education. "[T]he technologies that we use to distribute learning do not produce magic by themselves" (Barcelona, 2009, p. 193). In other words, technologies are to complement students' efforts in the classroom, not supplement them. For example, if a student is unsure about a topic, they can search and watch online videos to help with their understanding of the topic; those digital resources can help students participate effectively in the classroom and provide a better understanding of an exam or paper to their professor.

Lastly, instructors forced to teach remotely do not make the instructor bad; Barcelona (2009) discussed this argument further. “After all, poor pedagogy is poor pedagogy, whether it is taking place in a traditional on-campus classroom or within an online electronic class session.” (Barcelona, 2009, p. 193). If used effectively, online learning can help students and instructors collaborate in classroom facilitation. Barcelona (2009) said, “... online learning, compared to face-to-face instruction, likely provides more opportunities for learning time, additional access to learning materials, and increased opportunities for collaboration.” (p. 194). In other words, because students are sitting in chairs while the professors are lecturing, creating a hierarchy in the classroom, students and professors can work together to provide a learning environment for both parties.

Though students are apprehensive about the resources, online is not a permanent solution to preparing students for college experiences. “While there may be some benefits of online learning in the realm of engagement, it seems that there are also some sacrifices online learners make when it comes to an engaging educational experience” (Dumford & Miller, 2018, p. 462). Many university professionals agree that connecting with students in person is best for both the student and the university. “Ideally, we prefer having the students on campus, but with ...online ... we have developed a powerful alternative to getting students prepared to excel once they arrive on campus.” (White et al., 2011, p. 9). Using an online delivery for summer bridge program could complement in-person efforts and provide more wrap-around services to meet the students where they are. Barcelona (2009) stated that online learning is essential to institutions’ strategic plans. However, though it is not a permanent solution, the demand and desire to explore online learning

are present. “Online instruction can offer many advantages for students providing students with greater access to courses, even from distant campuses, as well as greater scheduling flexibility” (Barber et al., 2021, p. 22). In other words, higher education institutions and summer bridge programs must find ways to incorporate the remote environment.

Summary

Summer bridge programs are transitional programs targeted at high school seniors who will be incoming first-year students at higher education institutions. The summer bridge program helps students, especially underrepresented minority students, with their challenges at their institution or class. With the COVID-19 pandemic, online programming, like summer bridge programs, became required to keep students on track and institutions open. Online summer bridge programs may be different facilitation from traditional in-person facilitation. However, though the methods are other, online summer bridge programs are a viable facilitation option for college students, especially underrepresented minorities and incoming first-year students. Regardless of the facilitation methods, all parties, students, faculty, staff, and others, cannot be satisfied.

To see how summer bridge programs impact their participants, there is more research to help close those gaps. For example, with the existing research, little research discusses how summer bridge program participants perform at the institution, not just in a particular course. Hopefully, my dissertation will do that. By looking at underrepresented minority summer bridge program participants, underrepresented minority students, and the campus, I will show that no matter how institutions build the bridge to being

successful at the institution, whether remotely or in-person, students will be successfully retained and appreciate the institution's efforts for complementing their academic efforts.

CHAPTER THREE

METHODS

Research Design

I used a sequential mixed method design which implements qualitative and quantitative data in steps. “The sequential transformative strategy is a two-phase project with a theoretical lens (e.g., gender, race, social science theory) overlaying the sequential procedures” (Creswell, 2009, p. 212). In other words, one type of data is collected first, followed by the other. “Sequential timing occurs when the researcher implements the strands in two distinct phases, with the collection and analysis of one type of data occurring after the collection and analysis of the other type” (Creswell, 2011, p. 66). For example, the researcher may observe students in the classroom, noting behaviors, and then collect students’ GPAs to see how they did.

The sequential method could be seen as the researcher conducting two separate, disconnected research approaches. However, sequential research methods allow one research method, qualitative or quantitative, to funnel into another. Creswell (2009) echoed the sentiments, stating that “[sequential] mixed methods procedures are those in which the researcher seeks to elaborate on or expand on the findings of one method with another” (p. 14). For example, when the researcher analyzed the data from the classroom observation in the previous example, the researcher not only understood the quantitative relationships with the GPAs but also understood how the students’ GPAs impacted the classroom environment and the teacher.

Sequential transformative design examines the data separately to explain the research. Creswell and Guetterman (2019) stated, "...the researcher does not have to converge or integrate two different forms of data" (p. 554). In other words, the results from the quantitative and qualitative components can be explained separately because they address different phenomena. The quantitative and qualitative data are separate components that create an explanation of the research.

The purpose of sequential transformative design is to target which data are to be collected and analyzed first before collecting the next. Creswell (2009) stated that "...the sequential transformative model has a theoretical perspective to guide the study. The aim of this theoretical perspective is more important in guiding the study than the use of methods alone" (p. 212). For my dissertation, when looking at the student persistence of remote summer bridge program participants, I was primarily guided by an evaluation framework to the research, to explore whether the students who underwent the changed circumstances of summer bridge still benefitted from that experience. As Wanzer (2021) explained, the specific focus of evaluation research provides a more narrow set of results that can be then expanded to other contexts. The conceptual framework that shapes evaluation needs was therefore the theoretical perspective used to guide this sequential mixed methods approach (Chen, 2014).

Sequential research methods design is an attractive research method not just for how the findings are presented but also how the methodology is conducted. Creswell (2009) mentions that sequential transformative design "...may be more appealing and acceptable to those researchers already using a transformative framework within one distinct methodology..." (p. 213). Sequential transformative design may be preferred

because the researcher can focus on one research method and review the results before moving on to the next research method. For example, if a researcher can have a better understanding of what the quantitative data means after conducting interviews and analyzing its findings, the researcher may also ask better questions within the interview or survey because the researcher reviewed quantitative data. The sequential transformative design may allow the researcher to refocus without having to completely repivot on their researcher.

Population, Sampling, and Participants

Population and Sampling

The population for this study was incoming first-year students who graduated from high school with little to no prior college experience. These students will be eligible to participate in a summer bridge program. As stated in Chapter Two, the students graduating from high school and entering college for the first time have challenges. Students who are marginalized, underrepresented, low-income or first generation have additional challenges to greet them once they enter college. Because of that, a summer bridge program helps transition these students to not only the classroom, but campus partners and resources to ensure their success. These students can also start to maintain and build upon their sense of belonging at the institution.

Summer bridge participants at the institution moved on campus for one week in July. The 50-60 participants lived in the residence halls and participated in the program from 8 A.M. to 8 P.M. Students not only got academic preparation in math and writing, but they also go support from campus partners, like advising and career services. There were other community building programs, like going to the on-campus recreation center,

playing video games, or sharing their struggles with their peers. These programs assist with the informal community building the participants did within the residence halls.

The summer bridge program was facilitated with two full-time program coordinators who stayed on campus with the participants. The program coordinators received support from their office's senior director and fellow full-time colleagues; they assisted in some of the larger facilitation programs. Lastly, there would be 12-15 student leaders who served as peer mentors. The peer mentors in this program are called ambassadors. The summer bridge program initiated mentoring relationship with the summer bridge participants and the ambassadors. The ambassadors will get a small group of bridge participants to connect with throughout the academic year.

However, the COVID-19 pandemic forced summer bridge programs, and other university necessities, to a remote format. The bridge participants in July 2020 and July 2021 had a unique experience that others prior did not have. For example, prior to July 2020, students moved onto campus for a week to start connecting with the university and each other. However, July 2020 and July 2021 cohorts could not move on campus; many of the programs and connecting had to be done through a computer screen along with other contextual challenges. Despite the larger contextual changes, the staffing did not change during this time.

The sample was selected based on purposeful criteria. The sample was incoming first-year students who participated in summer bridge in July 2020 and July 2021. To be considered for the program, incoming students need to volunteer to participate in the program. To be invited, students had to meet the qualifications: 2.99 high school GPA or below, 20 or below on ACT, or 1050 or below on SAT. Students can also participate if

they were opted out of taking the ACT or SAT. To participate in the study, the participants will need to be 18 years or older. The participant will also have to have completed the summer bridge program and at least one semester with at least one course.

Participant Description

Survey Participants

The survey participants must have participated in the summer bridge program in July 2020 or July 2021 remotely. The survey participants also had to enroll as a first-year student at the beginning of the 2020-2021 or 2021-2022 academic year and completed at least 1 semester for at least 1 course. Lastly, the participants must be 18 years or older at the beginning of the study. With these criteria, there were 103 potential participants, with 50 participating in July 2020 and 53 participating in July 2021. However, 82.8% (77) of participants had valid email addresses. I sent three emails, February, March, and April, requesting participation in the survey. Of the 77 potential participants, 14 students completed the survey anonymously.

Of the 14 students who responded, 11 identified as female while three identified as male. Of the survey participants, 92.86% identified as Black or African-American and 7.14% identified as Hispanic or Latin/o/a/x/é. Five of the participants (35.71%) identified as a first-generation college student while eight (57.14%) did not and one (7.14%) was unsure. The average age of the participants was 21.78 years old. When asked if the participants were still enrolled in the institution, 92.86% said yes with 61.54% (8) were juniors with 56-90 credits and 38.46% (5) were seniors with more than 91 credits. There was 1 participant (7.14%) who was not enrolled in the institution. This participant took a gap year to gain work experience in their field.

The participants had varying experiences with online or remote instruction before participating in the remote summer bridge program. Out of the 14 survey participants, 64.29% (9) stated having experience with online instruction. Most of the experience were in grades 11 and 12 and outside school. In the 11th grade, the participants had an average of four courses online for an average of 3.167 months. In the 12th grade, the participants had an average of 6.375 courses for an average of 7 months. Lastly, outside of high school students were participating in remote experiences in 7.67 courses for an average of 30 months.

Interview Participants

Out of the 14 respondents, seven students agreed to participate in the interview. Six participants completed the interview. Below in Table 3.1, you will see the information regarding each interview participant. Names have been changed to protect the student's identities.

Table 3.1

Summary of Interview Participant Characteristics

Name	Year	Race	Bridge Participation	Major
Claudia	Senior	Black	2020	Health Sciences
Doug	Senior	Black	2020	Graphic Design
Valerie	Senior	White/Hispanic	2020	Education
Lee	Junior	Black	2021	Film
Dawn	Senior	Black	2021	Dance
Serena	Junior	Black	2021	Psychology

Four of the students were seniors and two were juniors. Fifty percent of the students participated in the remote summer bridge in July 2020 and the other fifty percent participated in July 2021. Of the interview participants 83% identified as Black or African-American and 16% identified as White. All the interview participants were currently enrolled at the institution.

Instruments and Measures

With using a sequential transformative mixed method design, I used different instruments and measures for the quantitative and qualitative data. I used three different sources for the data in this dissertation – surveys, interviews, and existing records held by the program.

Survey

I developed a survey designed to be taken by students who had attended their summer bridge program remotely because of COVID-19. I inquired about the summer bridge program, but also the student's overall persistence. Again, the student's persistence is measured by their attributions, self-efficacy, resilience, and sense of belonging.

First, I collected data about their overall experience regarding summer bridge. With some students being several years removed from the initial summer bridge program, I evaluated their feedback. The program has an evaluation that students complete twice: in the middle of the week-long program and at the end. The evaluation questions were structured with the remote experience in mind. For example, within the survey, students were asked about the social programs, like the virtual arcade, etc. The questions will help the participants reflect on the experience.

Secondly, I collected data on if the students felt prepared for college. Regardless of the remote experience, I gathered data to learn if the students felt ready. This will also connect to their attributes about college as well as the remote learning experience. As discussed in Chapter Two, students' attributes can impact their perception and overall success of certain tasks, like writing a paper or giving a presentation. To measure their self-efficacy, I used the Self-efficacy scale from van Zyl et al. (2022)'s scale.

The third survey construct was accessing the personal, social, and academic objectives in the remote summer bridge program. The bridge program focuses on making sure that these three pillars are addressed as they build upon the sense of belonging. The personal objectives would be the skills a student brings to college or learn to improve upon. For example, time management would be considered a personal objective. Objectives that would be considered academic are how the writing and math courses prepared them for future classes in the academic year. The academic objectives are different from the previously mentioned construct, students' preparedness because the program is providing the tools for academic objectives to be met. Lastly, the social objectives, connected with the participants' sense of belonging, would focus on how students described building relationships with their peers, faculty, and staff. To build upon the sense of belonging, I used the Sense of belonging scale from Imperial College London and adopted it to the participant pool (Centre for Higher Education Research and Scholarship, n.d.).

The last two constructs dealt with resilience. My goal was to learn the impact remote learning had on students' college experience. Students' attributes can impact how a student perceives and pushes through barriers. The remote experience was normative

because every college student who participated in the summer bridge program had to go through this. For example, some students may have recitations or labs with their courses. Not every student will have that experience and navigating through those classes are unique to the student's majors or interests. However, the remote class facilitation in 2020-2021 and 2021-2022 academic years were the only options for the students.

Lastly, I wanted to learn if the summer bridge program impacted and helped their resilience. I collected data to learn if the summer bridge program challenged and changed their outlook on their resilience. For example, I want to know if a student who failed a math exam knew and utilized resources like tutoring or professor's office hours. For this construct, I used the Nicholson McBride Resilience Questionnaire (Clarke & Nicholson, 2010).

Interview

At the conclusion of the survey, participants were asked if they would like to continue their participation in an optional interview. To participate in the interview, participants provided their email and phone number. Once received, I will contact them requesting that they pick a time that works best for them. All interviews were scheduled for 60 minutes.

The first area I asked about was the students' initial thoughts and expectations of the summer bridge program. Students' perception of their college experience was extremely different than what they thought or experience vicariously. The students' thoughts and expectations could lead to the attributes students possess about online learning and the summer bridge program.

Secondly, I want to know how students felt that the summer bridge program helped their self-efficacy. I want to learn how the students saw themselves completing their first year and college experience prior to attending summer bridge, but also after participating summer bridge. I therefore asked questions about how they felt the summer bridge program impacted the way they saw themselves persisting at the institution.

The next objective from the interview was to learn more about student's resilience. Again, the pandemic along with other external factors may have impacted students as they navigated through their first year. The summer bridge program has the potential of impacting the participants negatively or positively. For example, students may feel overwhelmed with the requirements of the summer bridge programs or they could feel supported through the summer bridge program. Therefore, I asked questions to gather their impressions regarding if the summer bridge program reduced the impact of those external factors and stressors.

The fourth objective was to learn about the student's sense of belonging. I wanted to know how the students the process of building relationships with the fellow participants, peer mentors, or facilitators. I hoped to learn if the students felt like they belonged at the institution despite participating in summer bridge remotely. While hearing from the interview participants, I hoped to gather information of their sense of belonging through their personal and social experiences, both through their memories of the summer bridge experience and their subsequent college life. For example, I want to gather information about their participation in clubs, whether through the remote time or later as restrictions reduced. Overall, I wanted to learn from the students if they felt like

the key stakeholders and program facilitators cared about them and if they felt connected with institution.

Lastly, I collected their suggestions for improvement. One of the lessons from the COVID-19 pandemic is that nothing is for certain. I collected data to know what the students felt were important in a remote summer bridge program. During July 2020 and July 2021, the summer bridge program was not able to get the insight of students who we have gone through this experience. With their testimonies, the summer bridge program facilitators could use this information to build upon a remote summer bridge program if it needed to be explored.

Existing Data Sources

The first existing data sources were the completion survey from the summer bridge program participants conducted at the end of each program from the years 2018 to 2022. One of the reasons that I wanted to use this information was to compare how students felt at that moment of the summer bridge program compared with how they felt about the program now being a few years removed from it. Also, I wanted to compare the information from these reports to see if there were identifiable shifts in responses over the Covid period. The students who participated in July 2021 did not complete a summer bridge program survey.

The second existing data source was the retention numbers for the summer bridge participants during their first year. I again compared data from the participants from the cohorts from 2018 through 2022. One reason I explored these cohorts is to see the overall retention and success of the program longitudinally. The retention data was of two periods – the retention from students' first to second semester (assessed in January of

their first year), and their retention from their first to second year (assessed in September of their second year).

The last existing data source is the GPAs for these five cohorts. These grade reports identified semester GPA (fall and winter individually) as well as the cumulative GPA (overall GPA for year one) for the students at the end of their first year. The reason why I explored GPAs because it is an outcome of the students' academic performance during their first year. Looking at the semester and cumulative GPAs allowed me to identify potential trends and patterns academically.

Data Collection Procedures

In this section, I will explain how I obtain the quantitative and qualitative data. This section will include timelines, permissions, and my role in collecting the data.

Quantitative Data Collection

The quantitative data collected are in two categories, existing data, and information from the quantitative survey. For the existing data sources, I emailed the senior director of the multicultural office, facilitator of the summer bridge program, to gather de-identified quantitative data for the 2018, 2019, 2020, 2021, and 2022 cohorts. The de-identified data was first-year semester and cumulative GPAs and first-year semester and year retention for the same cohorts. For the surveys, I collected all accessible surveys; the 2018, 2019, 2020, and 2022 cohorts (missing for the 2021 cohort) completed two surveys per summer bridge. For the duration of summer bridge, there are two surveys distributed for feedback; the first is distributed on Wednesday to discuss the activities for Sunday through Tuesday and the second is distributed on Saturday to get feedback on the activities on Wednesday through Friday.

The other quantitative data was from the distributed quantitative survey. In February 2024, I received approval from the Institutional Review Board (IRB) to conduct the quantitative survey. I collected the emails from Banner and organized by cohort year. I confirmed the email addresses with the records of students who participated in the remote summer bridge program in July 2020 and July 2021. After, I sent an email to 77 summer bridge program participants with valid email addresses to partake in the survey. I emailed students in February 2024, March 2024, and April 2024.

Qualitative Data Collection

The qualitative information was collected after participants completed the quantitative survey. At the conclusion of the survey, participants were asked if they wanted to participate in an optional interview. For those students who agreed to participate, an email was sent for them to select an hour time slot in the March and April 2024. The participant selected a time based on their schedule. The five interviews were conducted through Zoom and one interview was conducted in person. The interviews were recorded via Zoom. Once the interviews were completed, I informed the participants that they would receive a transcription of the interview for their approval within three weeks. I received email confirmation of the transcriptions. I redacted any identifying information, including names and institution. Participants were not instructed to omit identifying information to encourage the participants to share freely without having to edit themselves in real time.

Data Analysis

In this section, I will describe my process for analyzing the quantitative and qualitative data.

Quantitative Analysis

The quantitative data I analyzed came from participants' grade-point average (GPA), retention, and existing summer bridge program surveys. The University of Arizona (n.d.) explained GPA as “the arithmetic mean of the grade points earned for all credits...” In other words, the institution takes all the grade values and divide them by the total number of credits. However, in March 2020, in response to the changes at the institution, undergraduate students could convert their grades to satisfactory or unsatisfactory grades. If students selected to have this switch, these grades would not impact their GPA. In other words, the students received either credit or no credit for the course. The institution also converted all failing grades to unsatisfactory grades; in other words, students did not receive a failing grade during these semesters. This modification was only available for the Winter 2020, Fall 2020, and Winter 2021 semesters. ([Redacted] University, n.d.).

To analyze these data, I examined the cohort's grades using a repeated measures ANOVA analysis. This analysis examines the difference observed between the means of the repeated measures compared to the combined variability across all time-points or repetitions (the standard error of the mean), with the covariance of the shared association taken into account. As such, this analysis determines (1) whether the size of the difference between the repeated means was larger than could reasonably be expected to occur by chance given the association of the same people being measured at all times, and (2) whether the change corresponded significantly with different change patterns (linear, quadratic, cubic, and higher order curves). For this study, I specifically focused on

whether change observed between the 2019 and 2020 cohorts, and between the combined 2020-2021 cohorts and the 2022 cohort.

The second existing data source that I examined was retention. The National Student Clearinghouse Research Center (2023) defined retention as “[the] rate represents the percentage of students who return to the same institution.” In other words, the students continue to attend the institution where they completed the summer bridge program. For the purposes of this study, I examined the change from the initial starting number of summer bridge participants through the semesters fall and winter and enrolling from the first year to their second year at the institution, again using repeated measures analysis of variance methods.

The last existing data source was the summer bridge program surveys. For surveys completed in 2018 and 2019, the participants answered yes or no to the survey items. Starting in 2020, the surveys transitioned into a five-point Likert scale ranging from strongly disagree (0) to strongly agree (5). To get a comparative value across all years, I converted the 2020-2023 survey responses to a yes or no system. Any response that was rated strongly disagree (0) or not applicable (n/a) to moderate (3) was converted to a no (0). Any response that rated agree (4) to strongly agree (5) was converted to a yes (1). The analyses done with these data were descriptive, examining percentage agreement to general areas addressed by the surveys in common across the cohorts.

The final quantitative data source came from the survey designed for this study, completed by remote summer bridge participants February through April 2024. The survey items were on a five-point Likert scale ranging from strongly disagree (0) to strongly agree (5). My analyses of these data were again descriptive, examining the

average responses to items addressing the different constructs measured by the survey (described above).

Qualitative Analysis

The interviews provided a great deal of qualitative information. Once the interviews were transcribed, I reviewed the transcripts. While analyzing the interview transcripts, I went through three cycles of coding: initial, pattern, and thematic. The first phase was initial coding. Saldaña (2013) stated “[initial coding] is intended as a starting point to provide the researcher with analytic leads for further exploration and “to see the direction in which to take [this] study” (p. 101). I read through the individual interviews and highlighted participants comments that aligned with one of the four theories, attribution theory, self-efficacy theory, resilience theory, and sense of belonging. If the statement highlighted in two areas, it was noted in the interview transcript. Also, if a statement was noteworthy but not aligned with the theories, the statement was highlighted with the reason why it was noteworthy.

The second cycle of coding was pattern coding. Pattern coding is “...a category label (“meta-code”) that ... organizes the corpus into sets, themes, or constructs and attributes meaning to that organization” (Saldaña, 2013, p. 266). In other words, pattern coding allows to see trends and themes emerge across responses to certain questions. To conduct this process, I put the interview questions and responses in an Excel spreadsheet. Each column was the student alias, and the row was the questions I asked the student. If there were following up questions, they were attached to the primary question. Once I entered the responses to the corresponding question, I entered response in ChatGPT to get an initial group of codes. At this stage, the term “code” indicates the inferred content of

the response. I reviewed the codes against the interview transcripts to ensure they were valid codes from the participants' responses. Table 3.2 shows the codes that emerged after several rounds of coding.

Table 3.2

List of Codes and Examples of Quotes Within that Code

Code	Example Quote
Uncertainty	<i>I was ... a little nervous like with the whole social aspect ... because I got them obviously like when you come into an environment you don't know a lot of people.</i>
Fear of new situation	<i>I know in the beginning I was a bit scared, mainly because as far as we're doing this online and second, I was just completely new to the school.</i>
Academic skills	<i><it helped me> receive a high GPA because I would just force myself to like study, take notes, do projects and do all that kind of fun stuff.</i>
Mixed emotions	<i>I don't think I need to do this, but then I was like, ... I wanted to like be more exposed to like, on what college would be like.</i>
Online adjustment	<i>Since I was starting on everything was online for me, I kind of was scary, but once I got used to it, everything seemed pretty easy.</i>
Parent/family influences	<i>I had no real like concrete direction top of that no one in my immediate family has went to OU, so I had nobody to kind of go to</i>
Confidence	<i>I knew what to expect, like. Oh yeah, we're going back so I gotta start preparing myself.</i>
Adjustment	<i>At first I was very uncertain because, I was like, how's it gonna work?</i>
Confusion	<i>It was just very confusing and I had no real sense of direction even though I asked like my older sister what she would want to do or ask my family members and stuff</i>
Meeting new people	<i>it was hard to like, I guess, meet new people just because, not everyone wanted to show their face. through Zoom when we like had classes.</i>
Uncertainty	<i>At first I was very uncertain because, I was like, how's it gonna work?</i>
Introduction to college life	<i>We started college. So here we want to give you like a mini like presentation of how it will go.</i>
Disappointment about remote format	<i>I didn't get like the full experience that I know it's supposed to give because it is supposed to be in person and you know you come to campus, you staying on campus.</i>
Uncertainty and adjustment	<i>I wasn't as nervous as I thought I was going to be. Like I figured out how to make it work.</i>
Academic preparation	<i>I was really expecting it to be like it kind of was like class based a little bit because it's kind of like a little simulation in a way. It kind of gives you the idea on how classes are supposed to go.</i>
Personal growth and confidence	<i>I left feeling more confident about going into college.</i>
Engagement from professional/student staff	<i>And at the end of it, I did feel like, like I had a connection to [remote summer bridge program office]. And I definitely still do.</i>
Social connections with peers	<i>That was pretty fun when they were like trying to give like get us to play some games and stuff. Oh, okay, this is fun, even though we're on Zoom, you know.</i>

Table 3.2 (cont)

Code	Example Quote
Engagement with student leaders & peers	<i>Socially and like, oh I have to socialize now, so yeah. It was a complete change, but yeah.</i>
Academic preparation	<i>I think when it helped me academically wise as far as like being ready for college and you know, looking forward to it,</i>
Facilitation with remote environment	<i>I was excited but I was I was also sad just because everything was online I kinda wanted to meet everyone in person.</i>
Sense of community	<i>I think that going back to the not feeling alone being feeling alone is part of has been like a big part of my life because I can tend to be very antisocial ... I'm not the only one that thinks that so how that makes you feel like you belong somewhere in a way .</i>
Forming personal connections	<i>I didn't know anybody. I think only knew 2 other people ... We're all gonna be in different places. So I just didn't really know anybody.</i>
College preparedness	<i>[Most] of my [college] knowledge is come from like being here and stuff But it kinda like dips your toes a little bit and everything.</i>
Confidence and fulfillment	<i>I would say the first one would definitely be getting prepared for work because I realized that opening a [the institution's learning management system], I wasn't as intimidating seeing like a lot of classes and a lot of like weeks getting listed....</i>
Challenges with social anxiety	<i>I felt more confident about going into college. So my expectations for that time were most definitely met. I do. With this, this comes with being how I am, like a socially anxious person.</i>
In-person vs remote	<i>I honestly got the summer bridge experience not as a student, but as a mentor when I, you know, was [peer mentor] for the [summer bridge] program. So when I saw how they got to do it and I compared it to how I did it. I feel like if it was in person, it probably would have helped me a lot.</i>
Engagement and participation issues (tech)	<i>it's like it was really hard to connect people over, I think we did ... over Google Meet. ... You probably talk to people, but it wasn't like a, it's like more a on surface thing.</i>
Connections and friendships	<i>I made a couple of friends, but I just know that if we were in person I would be able to make more.</i>
Improved social skills	<i>Yeah, I would say that it helped because I actually have some of those students who were in the bridge program and some of my classes I actually get to see some of them</i>
Reduced feelings isolation	<i>So it's like I may be feeling, you know, the same as this person or this person, and just knowing that someone shares your same thoughts and beliefs.</i>
Boosted academic and professional discipline	<i>I was like scared to skip classes and stuff. Because of the [summer bridge program director] ... never once. Well, that's not what I was scared to skip classes. Never had like late assignments or anything.</i>
Online learning	<i>I didn't get like the full experience that I know it's supposed to give because it is supposed to be in person and you know you come to campus, you staying on campus.</i>

Table 3.2 (cont)

Code	Example Quote
Belonging	<i>Being a freshman is like OK, I'm not the only one that thinks that so how that makes you feel like you belong somewhere in a way</i>
Motivation and open-mindedness	<i>And I found a fulfilling feeling in my life when trying new things... That's why I like to try a lot of new things now.</i>
Guidance	<i>they helped me like start like here's what's gonna happen throughout those 4 years and very much made me like stay focused and stay in line versus if I just kind of went in chaotically.</i>
Personal responsibility	<i>You know, like, like things aren't going good, but like you're the only one who can change it. And you know, like, definitely got me out of my shell and made me like seize the moment. Cause otherwise I'm sure I would have been just as moopy for the rest of my years here.</i>
Academic preparedness	<i>So I feel like overall they set the bar for us to be at academically prepared for the entire year.</i>
Academic resources	<i>The summer bridge program helped me academically, academically by providing me with resources and materials and making sure that we are like I guess like organized in a way just like. On top of things and just was always there to like help us.</i>
Organizational skills Discipline and attendance	<i>I would say the effect was having good amount of time management.... Well, that's not what I was scared to skip classes. Never had like late assignments or anything. I think eventually once I kind of got the hang of college, I did start skipping and stuff, but you know, like initially, I say for like the first 2, 3 months, like I was too scared to do that.</i>
Subject-specific preparation	<i>It really helped me a lot with math. I've always struggled with math and I learned that, like even in college, and it's not like in high school..., you gotta stand out or you gotta show that, oh, you wanna learn how to do it.</i>
Enhancing writing skills	<i>I learned it's the work; it's quality over quantity, the amount of pages doesn't matter. The professor really wants to see what you can do with your 3 pages or 2 pages.... Like what information can you get across efficiently and accurately without dragging it on 15 pages. [The remote summer bridge program] really helped me show that.</i>
Increased confidence and reduced anxiety	<i>I would say the first one would definitely be getting prepared for work because I realized that opening a [the institution's learning management system], I wasn't as intimidating seeing like a lot of classes and a lot of like weeks getting listed....</i>
Academic rigor and expectations	<i>I wasn't as intimidating seeing like a lot of classes and a lot of like weeks getting listed and if I didn't because that's what they had for the summer bridge...</i>
Writing expectations	<i>So, I learned about mostly like within the like the writing portion of it, they taught us like how to, like properly write on like a college level based off of a high school level because in high school, you know, writing and math is different and when it's being taught in like a totally different.</i>
Virtual interaction	<i>I made a couple of friends, but I just know that if we were in person I would be able to make more.</i>

Table 3.2 (cont)

Code	Example Quote
Limited social interactions	<i>Freshman year was definitely like my worst year when it came to like social and all of that. The only people that I did know were like my roommates and [summer bridge program coordinator]. So, you know, it was pretty limited when it came like my social interaction.</i>
Familiar faces on-campus	<i>Already knowing someone in the room gave me confidence to speak to someone else because it's like okay I've already made this connection like how many more connections can I make. It's like, okay, I know this person we met in [summer bridge program]. That's already a familiar face. Like it just gave me more confidence to start a discussion with them in another person like it just gave me someone to I don't know if bounce ideas off of.</i>
Encouragement and confidence	<i>It's like, okay, I know this person we met in [remote summer bridge program]. That's already a familiar face. Like it just gave me more confidence to start a discussion with them in another person like I don't know it just gave me someone to I don't know if bounce ideas off of the word I'm looking for but there was still like a sense of comfort not that I would like I didn't enjoy engaging with the person I met doing bridge week, but I don't wanna say someone to fall back on.</i>
Connecting with faculty and staff	<i>I felt comfortable with [her appointed financial aid advisor] but when it came to any other new spaces like in offices and whatnot I still did feel a little hesitation or like It was nerve breaking, like even to call the CMI office for the first time.</i>
Social anxiety and overwhelm	<i>I knew what to expect, like. Oh yeah, we're going back so I gotta start preparing myself. Thanks. Socially and like, oh I have to socialize now, so yeah. It was a complete change, but yeah.</i>
Inspiration and role models	<i>The [peer mentors] really impacted me like social wise, but they really, they were really out like they were really outspoken. So it really inspired me to be more outspoken and to be more involved on campuses.</i>
Getting comfortable being uncomfortable	<i>Yeah, I mean like what I learned from like my first year like only I can change Like what I'm doing, if I had a problem, it's like I can fix it. I don't know.</i>
Cultural and community engagement	<i>I want to be part of [Black student organization]. Eventually I did all those stuff like as I went on because I saw a representation of the people. The ambassador and other people, all the student leaders do stuff like that. So then I was inspired to do it.</i>
Mentor support	<i>[Having to set up] a meeting with this person has really helped me overall during the question year, likely, which made me stay on track</i>

Lastly, I conducted thematic coding, which was the third and final cycle of coding. Castleberry and Nolen (2021) stated thematic coding or analysis “... is used commonly because of the wide variety of research questions and codes that can be addressed with this method of data analysis.” (p. 808). In other words, thematic coding is applicable for different types of qualitative analysis. Saldaña (2013) further explained

thematic coding as “perhaps more applicable to interviews and participant-generated documents and artifacts, rather than researcher-generated field notes.” (p. 178). In other words, thematic coding allows the themes and ideas to emerge from the participants’ narrative.

I took the codes, the results of the pattern coding, and connected ideas that were connected. As a result of the three cycles of coding, five major themes surfaced: The major themes were fear and uncertainty, personal growth and confidence, preparation for college, making social connections, and finally guidance and support. Table 3.3 summarizes these themes and provides a mapping of the codes illustrated from Table 3.2.

Table 3.3*Correspondence of Codes to Major Themes*

Major Theme		Codes
Fear and uncertainty	Uncertainty	Adjustment
	Fear of new situation	Uncertainty and adjustment
	Mixed emotions	Fear and uncertainty about social integration
	Social anxiety and overwhelm	Mixed emotions
	Social anxiety challenges	Uncertainty/adjustment
	Fear and uncertainty	Initial hesitation and gradual comfort
	Initial reluctance/pressure	
	Overall anxiety/uncertainty	
Personal growth and confidence	Personal growth and confidence	Motivation and open-mindedness
	Building confidence	Increased confidence and reduced anxiety
	Confidence and fulfillment	Focus and preparedness
	Confidence and encouragement	Initial hesitation and gradual comfort
	Getting comfortable being uncomfortable	
Preparation for college	Introduction to college life	Boosted academic and professional discipline
	College preparedness	Major specific assignments
	Experience complementing SBP teachings	Subject-specific preparation
	Inspiring role models	Writing expectations
	Academic preparation	Enhancing writing skills
	Academic rigor and expectations	
Making social connections	Social consideration	Reduced feelings of isolation
	Limited social interactions	(Professional) communication
	Social impact	Communication
	Meeting new people	Social connections with peers
	Sense of community	Connections and friends
	Cultural and community engagement	Engagement with student leaders and peers
	Forming personal connections	
Guidance and support	Familiar faces on campus	
	Academic support	Appreciation for support system
	Access to academic resources (time management and organizational skills)	Inspiration
	Guidance	Engagement and support
	Connecting with faculty and staff experiences	Engagement from professional/student staff

CHAPTER FOUR

RESULTS

For my dissertation, I examined the 2020 and 2021 summer bridge program cohorts and their persistence and retention at the institution. Student persistence consisted of participants' opinions about the remote summer bridge, participants' self-efficacy, retention, and sense of belonging. The 2020 and 2021 cohorts participated in summer bridge program remotely as the U.S. practiced sheltering in place, wearing masks, and social distancing from March 2020 through April 2022. To assess the outcome of the students' persistence and institutional retention, I examined semester and cumulative GPAs for the participants' first year, semester and year retention, program satisfaction surveys, and newly completed surveys.

This section was divided primarily into two main sections: results derived from quantitative data and then those findings from qualitative data. Within the quantitative data, the existing data will be presented first. The existing data began with GPA data discussion, followed by retention and lastly, program satisfaction surveys during the summer bridge program completion. Then, I discuss the findings from the newly administered surveys completed by the remote summer bridge participants from 2020 and 2021. After I present the quantitative data, I will discuss the central themes that arose during the qualitative data. The qualitative data came from conducting six virtual interviews.

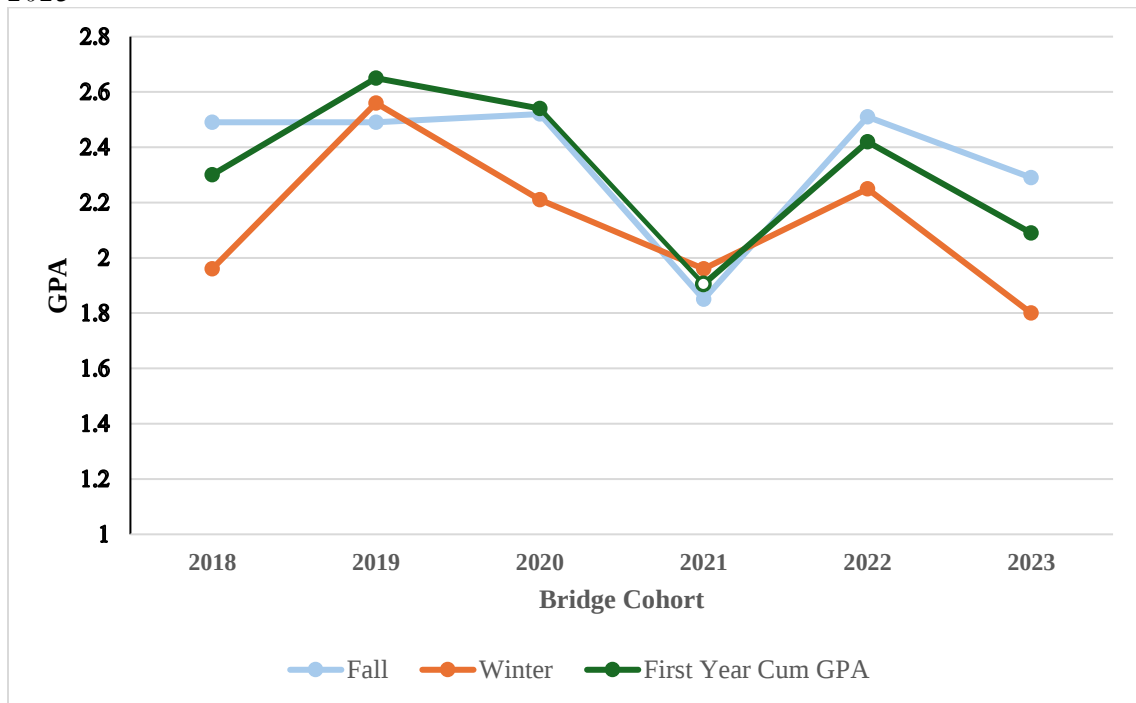
Results from Quantitative Data Sources

GPA

During the academic year, the summer bridge participants received three grade point averages or GPAs. Figure 1 shows these results. The GPAs were the fall semester (blue line), winter semester (the orange line), and first year cumulative GPA (green line). The program encourages students to receive a 2.5 semester and cumulative GPA. The GPAs were based on a four-point grading scale, ranging from zero (F) to 4.0 (A+). The program was unable to collect a cumulative GPA score for the 2021 cohort. Therefore, the cumulative first GPA for that cohort shown (with an open circle) is calculated as the average GPA of the fall and winter semester GPA.

Figure 4.1

Summer Bridge Participants' Fall, Winter, and Cumulative First Year GPA, From 2018 to 2023



The Fall GPA for the summer bridge participants stayed consistent throughout the years. The Fall semester immediately followed the remote summer bridge program. There were peaks in fall semester for the 2019 and 2022 cohorts which resulted in higher cumulative GPAs. However, due to the COVID-19 pandemic and other factors, I observed a significant dip in GPAs for the 2020 and 2021 cohorts. The Winter GPA displayed more variability compared to Fall semester GPAs. For this semester, I observed a peak in for the Winter semester for the 2019 cohort and, surprisingly, the 2021 cohort. However, for the 2020 cohort, I observed the lowest GPA among all years during the winter semester. For the cumulative GPA, I observed the peaks for the 2019 and 2022 cohorts; the 2019 cohort remained consisted throughout all three GPA reporting. However, there was a significant drop in the 2020 and 2021 cohorts.

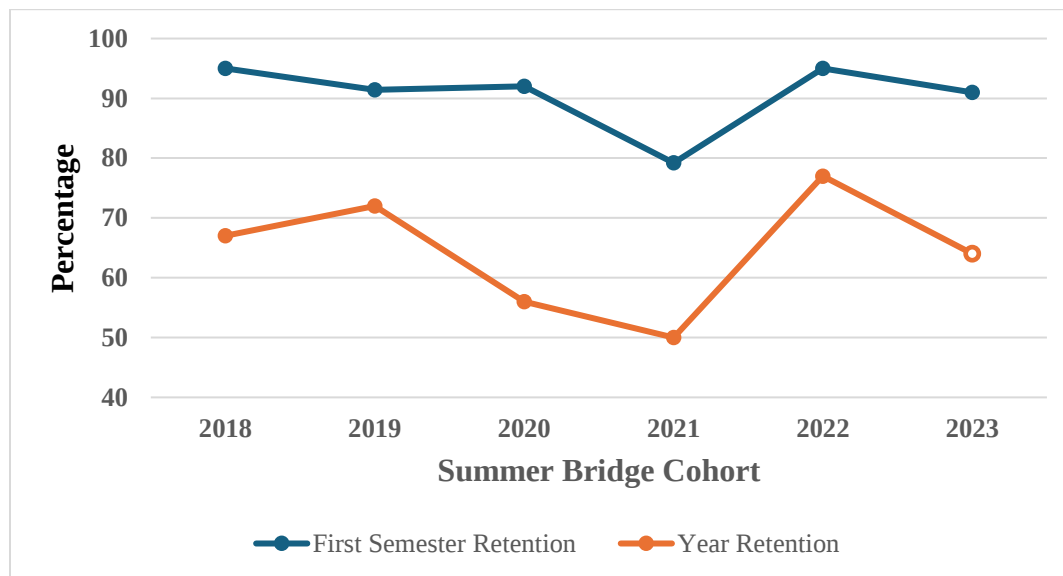
In general, the findings concerning grades for this period suggested that the summer bridge programs can help maintain stable academic performance in the fall semester. However, external factors, like the COVID-19 pandemic, can influence students' academic outcomes, particularly with the winter semester and cumulative GPA.

Retention

Retention was measured in two categories for the first-year students. The categories were semester retention and year retention. Semester retention is defined by how many students return for the winter semester who were enrolled in the fall. The year retention measures how many students attended class their second year at the institution who were here during their first year. Figure 2 shows these results. The 2023 cohort year retention numbers had not been calculated at the time of the dissertation analysis.

Figure 4.2

Summer Bridge Participants' First Semester and Year Retention, From 2018 to 2023



The first semester retention, students retained from fall to winter, was stable across the years. I observed a dip in the 2021 semester cohort. The 2022 cohort had the highest retention for the semester at 95%. The year retention numbers were lower than the semester retention rates. The highest year retention was the 2022 cohort. Despite having low retention percentages in 2020 and 2021, 2022 cohort reported the highest year retention before the slight dip of the projected year retention rate of 64% in 2023.

In general, the findings concerning retention for this time demonstrated the retention between the fall and winter semesters are stable; this indicated consistent support after summer bridge and throughout the fall semester. Overall, the semester retention is relatively stable with the year retention presented more variability. The 2021 cohort experienced a decline in their fall semester retention, highlighting there were factors impacted their ability to continue the academic year. Following the decline in 2021 cohort, the highest retention reported appeared in the 2022 cohort with a semester

retention of 95% and a year retention of 77%. The peak of retention with this 2022 cohort highlighted successful outcomes during that year. However, the projected dip in the 2023 cohort for the year retention (64%) will be the lowest retention since 2021 cohort. This finding suggested that there even with the in-person facilitation of the summer bridge program, there needed to be more focus on retention efforts.

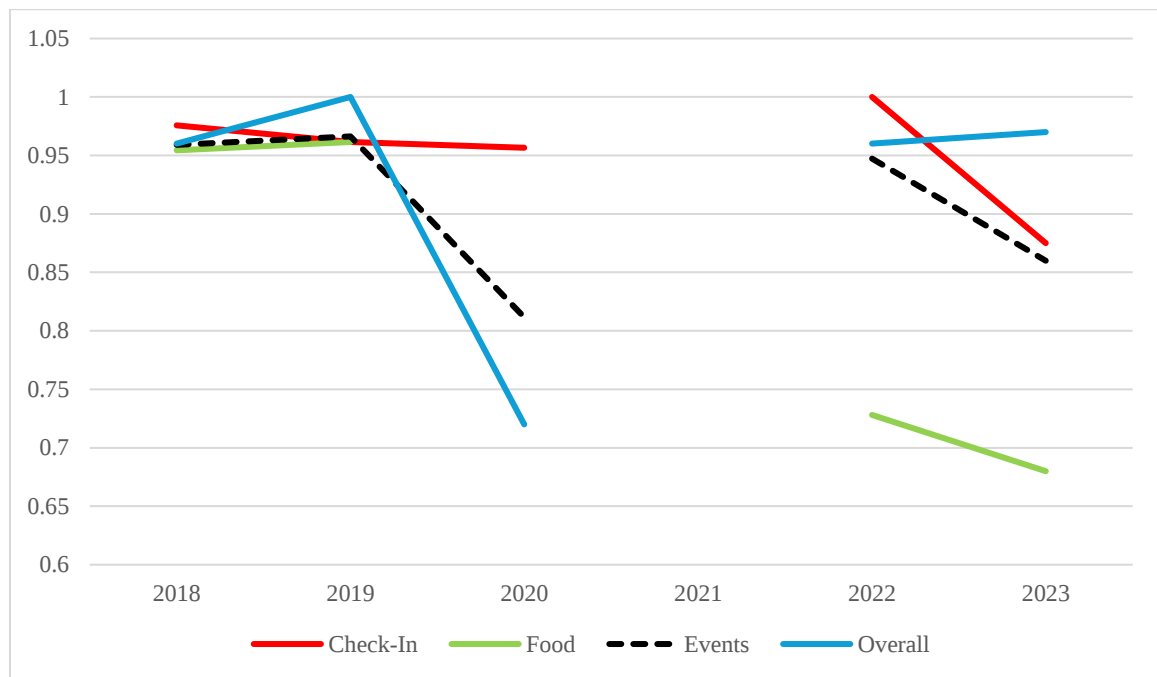
Existing Program Evaluation Surveys

During the summer bridge program, the program facilitators typically collect information from the participants to identify their approval with various aspects of the summer bridge program for program evaluation purposes. Figure 4.3 shows these results. Though the survey questions changed yearly, they fit within four categories: the check-in process (shown with a red line), the food (shown with a green line), the events (shown with a black dashed line) and their overall program satisfaction (shown with a grey line). Each survey item was a yes/no question, so the score for each category could range from 0 (no participants indicated satisfaction) to 1 (all participants indicated satisfaction). Figure 4.3 shows the findings of participant satisfaction with 2018 and 2019, two years before the remote summer bridge program, 2020, the first year of remote summer bridge, and the 2022 and 2023, two years after the remote summer bridge program. Due to complications with survey administration, no surveys were available from the 2021 cohort.

The participants' satisfaction with the Check-In process was high and remained even through the shift to remote bridge program. The check-in process satisfaction experienced a decline in recent years, which was a trend across the other categories. However, the satisfaction regarding the events declined during the remote summer bridge

Figure 4.3

Change in Satisfaction with Summer Bridge From 2018 to 2023



program. Though satisfaction returned in 2022 to pre-COVID numbers, like in 2019, the satisfaction declined again in 2023. Though there are no survey questions regarding food notable before and after COVID, dropping from 0.95 to less than 0.75. The most crucial result was the participants' overall satisfaction with the summer bridge program. Despite dropping dramatically in 2020, overall satisfaction rose to pre-COVID numbers by 2022; the increase was the only indicator that stayed high instead of dropping in 2023.

In general, comparison across the program evaluation surveys for the Summer Bridge program revealed a variety of satisfaction findings. The event satisfaction was impacted by the remote format of the summer bridge program in 2020. The decline in event satisfaction has negatively impacted participants' engagement and perception of events. The findings suggested that while certain aspects of the summer bridge program,

like events and activities, fluctuated in satisfaction, the summer bridge program managed to recover overall participant satisfaction to pre-COVID levels by 2022. But, recent declines from the 2023 cohort, like in events and food satisfaction, highlighted what areas need to be attended to maintain high overall satisfaction in future summer bridge programs.

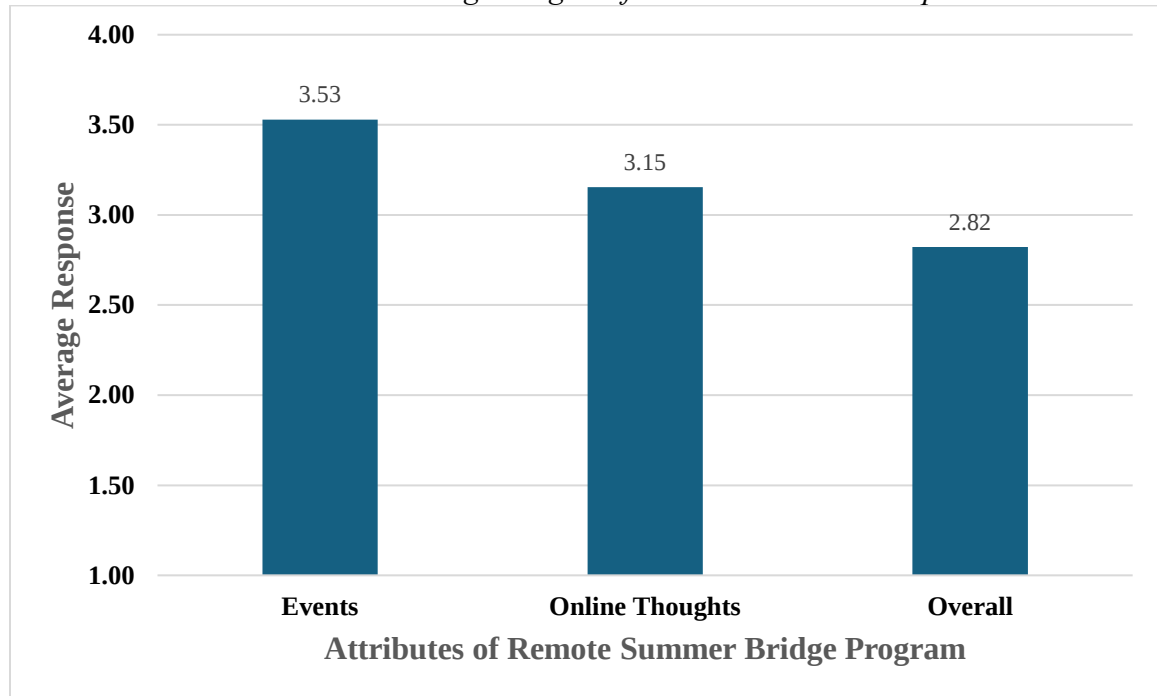
Surveys Specific to Remote Summer Bridge Experiences

As discussed in Chapter 3, I distributed surveys to students who participated in the remote summer bridge program in July 2020 and July 2021. Figure 4.4 shows the participants' attributes regarding the remote summer bridge program. The figure below highlights the average responses of the participants. Unlike the program evaluation surveys, these responses ranged from strongly disagree (1) to strongly agree (5). The areas in which these different items fell covered the participants' attributes were events, online thoughts, and overall attributes about the program. Events were activities that were completed through the remote summer bridge program. Online thoughts were participants' attitudes about online learning. Overall measured how the participants' felt about the remote summer bridge program in its entirety. Unlike Figure 4.3, participants did not reflect on the check in process or food during the bridge program.

Attributes regarding events were the highest of the three, at 3.53. Attributions about online programming and activities were high at 3.4. General attributions of the summer bridge program were moderately positive at 3.26. The highest rating was how participants' described events; the participants rated that over a 3.5. However, despite the attributes regarding the events and online attributions, the participants rated their overall feelings about the remote summer bridge program lower at 2.82.

Figure 4.4

Attributes the Remote Summer Bridge Program from the Online Participants

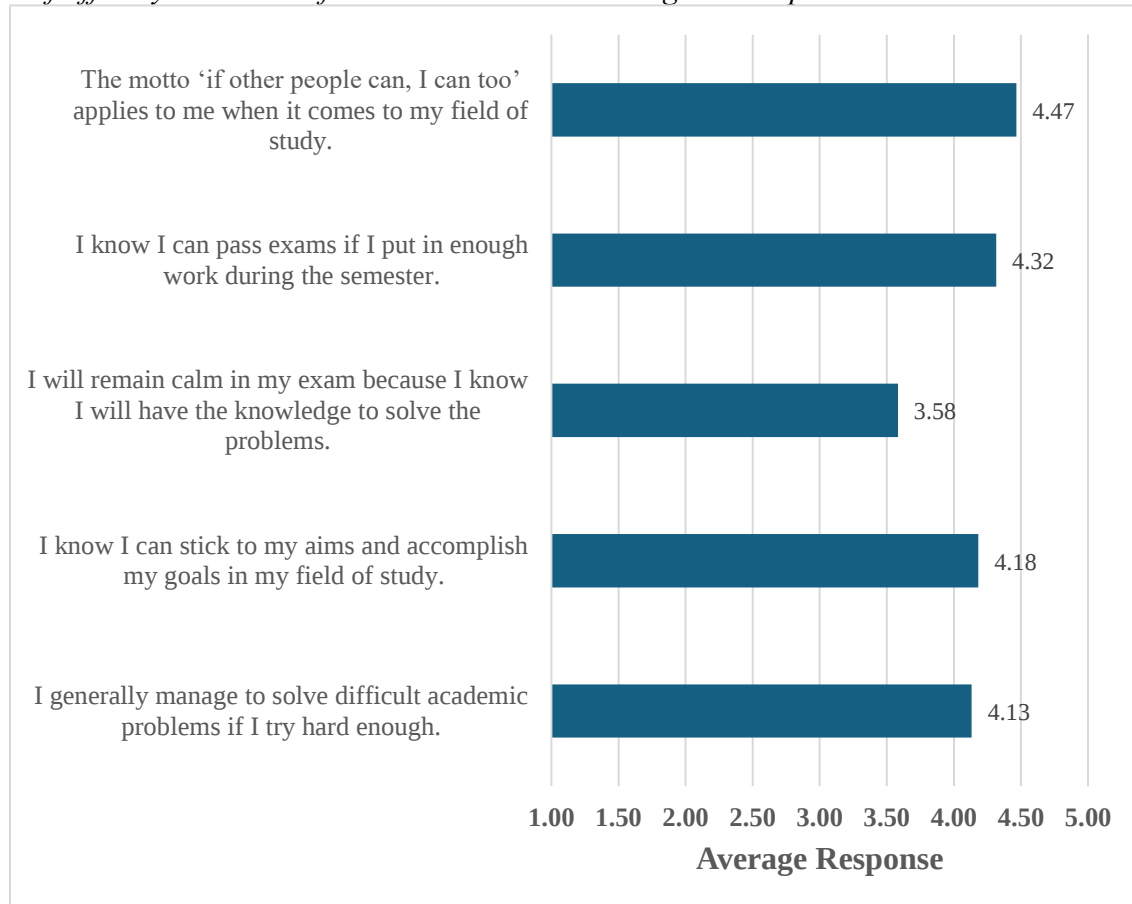


After receiving participants' attitudes regarding the remote summer bridge program and online facilitation, I asked participants about their self-efficacy in relation to participating in the remote summer bridge program. Again, self-efficacy is assessing whether a student can see an assignment or a task through to completion. Figure 4.5 shows participants' thoughts about their self-efficacy. The participants responded to the prompts regarding self-efficacy with strongly disagree (1) to strongly agree (5).

The highest response was "the motto 'if other people can, I can too' applies to me when it comes to my field of study." The participants responded closed to a 4.5 stating they agreed with that statement. Next, the participants responded an average 4.32 to "I know I can pass exams if I put in enough work during the semester." The lowest response was the next prompt, "I will remain calm in my exam because I know I will have the

Figure 4.5

Self-efficacy Statements from Remote Summer Bridge Participants



knowledge to solve the problems.” The participants responded with an average of 3.58.

The following prompt was “I know I can stick to my aims and accomplish my goals in

my field of study.” The average response was a 4.18. Lastly, the participants responded

with an average of 4.13 to “I know I can stick to my aims and accomplish my goals in my

field of study.” When I evaluated self-efficacy through these prompts, the average

response was 4.14. When examining the average responses, self-efficacy was the highest.

The next set of questions in the survey addressed resilience. In these questions, I asked participants if the remote summer bridge program gave the skills to bounce back if

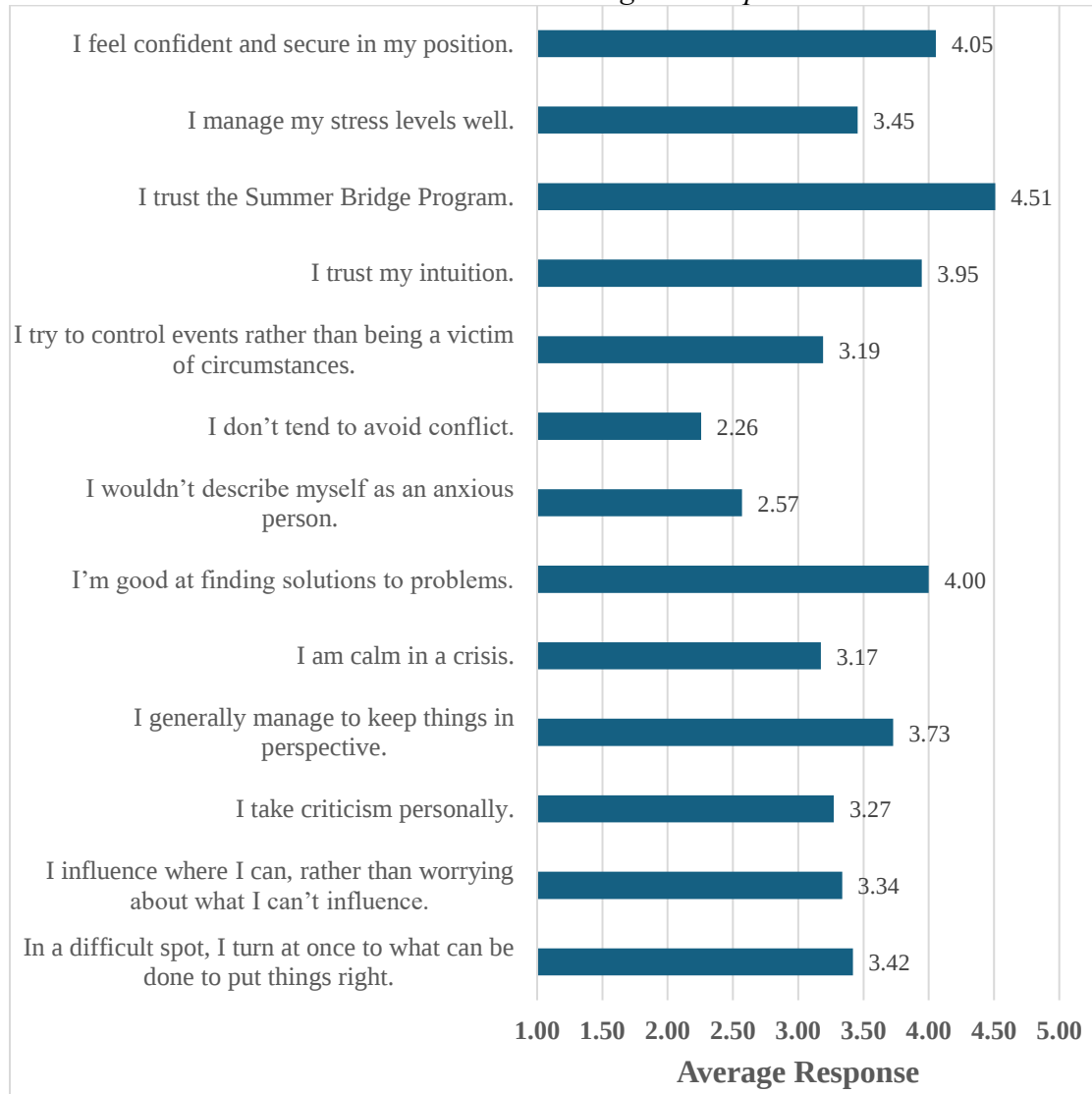
barriers and challenges arose throughout the college career. Figure 4.6 displays participant's perceptions regarding their resilience. The participants responded to the prompts regarding resilience with a scale of strongly disagree (1) to strongly agree (5).

The first prompt was "I feel confident and secure in my position." The participants responded with an average of 4.05. The next prompt, "I manage my stress levels well," was at a 3.45. When the participants were asked "I trust the Summer Bridge Program," they responded slightly over 4.5 (4.51). This was the highest response within the resilience prompts. However, the participants responded an average response of 3.95 to "I trust my intuition." The next prompt was "I try to control events rather than being a victim of circumstances." The participants responded with a 3.19. The participants answered with lowered responses in the next series of prompts. The response, "I don't tend to avoid conflict", was the lowest of the resilience responses resulting in an average of 2.26. The other low response was to "I wouldn't describe myself as an anxious person" with a 2.57. When participants were asked if they were good at finding solutions to problems, they responded an average of 4.00.

The next prompt was "I am calm in a crisis." The participants responded with an average of 3.17. When participants responded to "I generally manage to keep things in perspective," their average response was 3.73. Participants responded with 3.27 when asked "I take criticism personally." An average response of 3.34 was given when the participants were asked "I influence where I can, rather than worrying about what I can't influence. Lastly, the participants responded with a 3.42 to "In a difficult spot, I turn at once to what can be done to put things right." Overall, the average within the resilience prompts was 3.45; out of all the prompts, resilience responses were the lowest.

Figure 4.6

Resilience Statements with Remote Summer Bridge Participants



After discussing resilience, I asked participants about their sense of belonging at the institution and within the remote summer bridge program. Participants define sense of belonging as if they feel a part of the community within the institution. Figure 4.7 shows the participants' sense of belonging. Again, I asked the participants the degree in which they agreed with the prompt using the scale of strongly disagree (1) to strongly agree (5).

Figure 4.7

Sense of Belonging Discussion with Remote Summer Bridge Participants

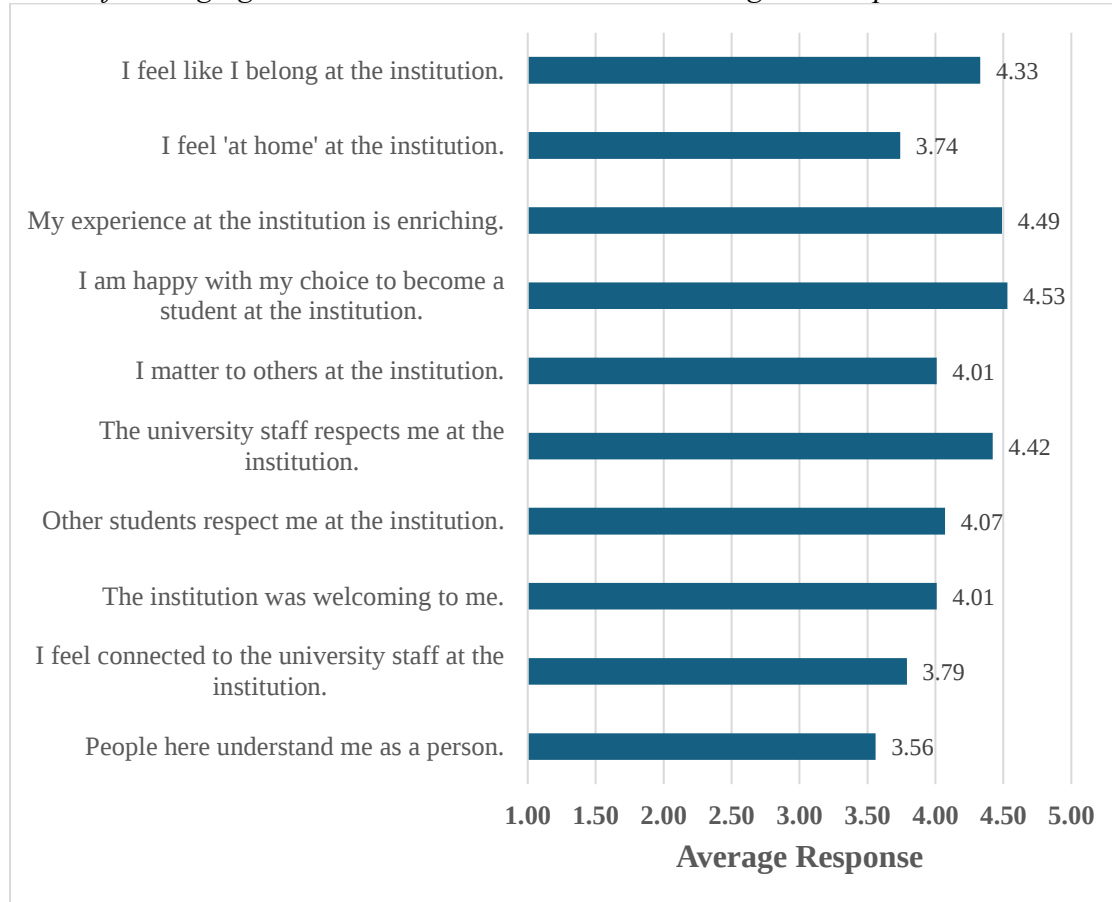


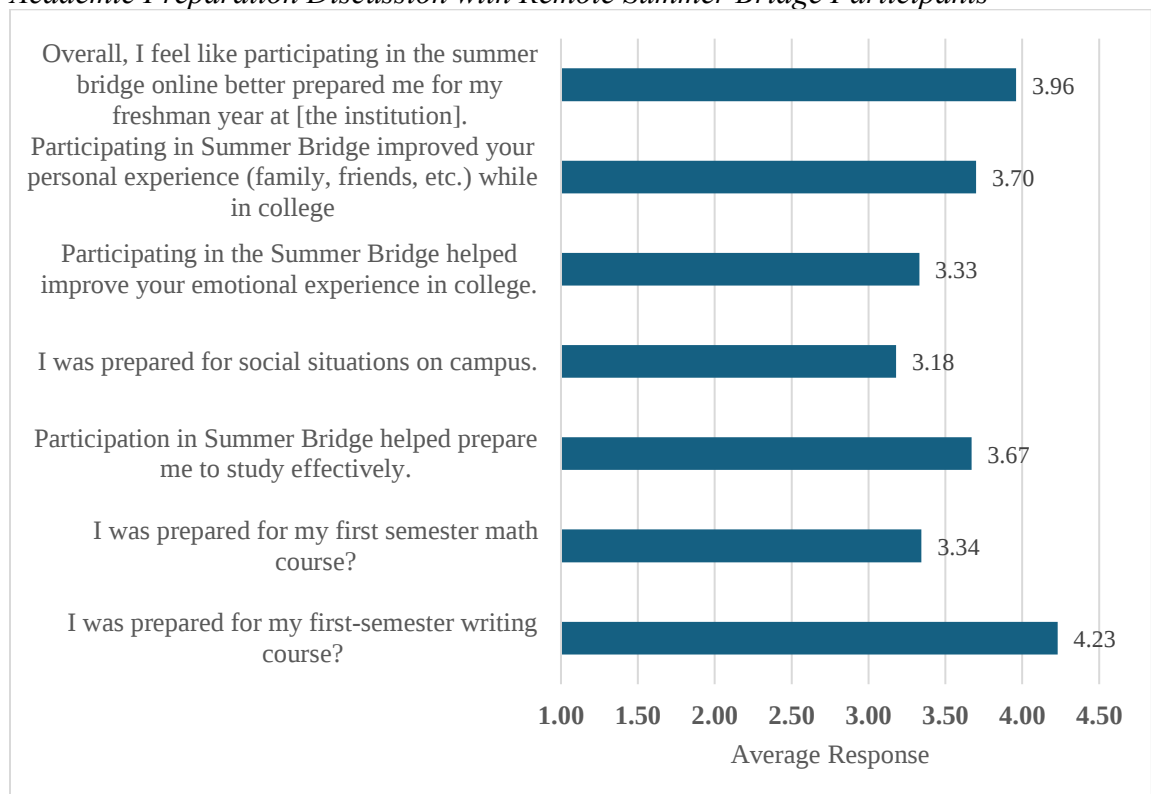
Figure 4.7 shows that participants' feelings regarding their sense of belonging at the institution. Participants responded to the first prompt, "I feel like I belong at the institution," with a 4.33. When asked if they felt at home at the institution, the participants responded with a 3.74, which is one of three lower responses. The next prompt, "My experience at the institution is enriching," received a 4.49 average. Participants responded to "I am happy with my choice to become a student at the institution" with a 4.53. This response was the highest within the sense of belonging responses. When asked if they mattered to others at the institution and if the institution

was welcoming to them, the participants responded to both with a 4.01. The following prompt, “the university staff respects me at the institution,” received a 4.42. Participants responded with a 3.79 to “I feel connected to the university staff at the institution.” The next prompt received 3.56 response; it was “people here understand me as a person.” Overall, participants responded with a 4.10 overall to describe their sense of belonging.

Lastly, within the survey, I asked students about their academic preparation within the remote summer bridge program. Figure 4.8 displays how the participants felt about the preparation received during the remote summer bridge program. The participants responded to the prompts regarding their perception of academic preparation with strongly disagree (1) to strongly agree (5).

Figure 4.8

Academic Preparation Discussion with Remote Summer Bridge Participants



When asked whether participating in summer bridge improved students' personal experience (family, friends, etc.) while in college, the participants responded with a 3.70. The next response, "participating in the summer bridge program helped me improve your emotional experience in college," the participants responded with an average of 3.33. The lowest response was participants' preparedness for social interactions; participants responded with a 3.18. The participants felt the summer bridge program moderately helped them study effectively; they responded with 3.67. When asked their agreement level with the statement "I was prepared for my first-semester math course," the participants responded with 3.34. The highest response regarding academic preparation was when participants were asked if they felt prepared for their writing course. The average rating was a 4.23. When the participants evaluated their participation in the online summer bridge program, they responded with a 3.96.

In general, the results from this survey showed the satisfaction with the remote format was low despite participants rating events and online programming high. The remote summer bridge participants demonstrated the highest in self-efficacy, followed by sense of belonging. Findings regarding participants' resilience varied across responses. The participants felt positive regarding their academic preparation and personal experiences despite having lower ratings, like stress management and feeling understood. To enhance the summer bridge program further, especially in a remote format, facilitators need review strategies of improvement in resilience and overall program satisfaction.

Findings from Qualitative Data

For the qualitative data, I interviewed six students who participated in the remote summer bridge program in July 2020 and July 2021. In Chapter Three, I described the

five themes that came up from the participants during their interviews: fear and uncertainty, personal growth and confidence, preparation for college, making social connections, and finally guidance and support. Findings specific to each theme are presented below.

Fear and Uncertainty

The first theme was fear and uncertainty. Overall, the students expressed adamantly being uncertain about what was happening in the world around them, but what was happening with their college experience and more immediately the remote summer bridge program. The participants were worried about whether programs and experience would work for them. In the interviews, the participants shared uncertainty around several areas of the college experience, like starting college and participating in this remote summer bridge program. The participants sharing this highlighted how overwhelmed and scared they were about their future.

One common thread running through many interviews was students' reports of very mixed emotions about their own place and experience in the program. Several of the mixed emotions came from the remote summer bridge program invitation. Claudia mentioned, *"I don't think I need to do this, but then I was like, ... I wanted to like be more exposed to like, on what college would be like."* Doug remembered feeling *"...a bit scared..."* and Dawn stated, *"I had my assumptions that it would just be like summer classes before school started, which I mean. I knew that it would be helpful, but I was also thinking about enjoying my summer before having to."* Even with some hesitancy, there were some participants who were excited about the opportunity. Valerie shared, *"I was excited but I was I was also sad just because everything was online I kinda wanted to*

meet everyone in person.” Other participants were scared due to the online nature of the program and meeting new people in an unfamiliar environment, like Serena. Serena said, *“I just knew that it was a responsibility that I needed to do and you know, it was virtual that year too and. You know, I didn't know. Like what exactly I was getting myself into before.”* Perhaps because of so much uncertainty around them, the participants were unsure of how to feel about the invitation for the remote summer bridge program.

Initial reluctance and pressure were also aspects of students fear or uncertainty mentioned in the interviews. When analyzing the transcripts, reluctance and pressure meant expressions of overall hesitation in attending college or being unsure about the value of their degree or major; they also discussed the internal and external pressure participants were feeling. Many participants shared their reluctance about their going to the institution with little to no in-person classes. Claudia mentioned, *“I remember being very scared wondering how was I going to be able to go to college when I couldn't go to in person classes.”* Valerie echoed the sentiments sharing, *“Since I was starting on everything was online for me, I kind of was scary, but once I got used to it, everything seemed pretty easy.”* Lee expressed not wanting to go to college initially. Lee shared:

I didn't really see the point and going to a college. Just because I was kinda looking at like a art degree from the beginning. So, you know, I wasn't gonna go. But, my siblings, as well as like my parents, kind of, kind of pressured me into going, not like bad pressure, but you know, they did say like you got good scholarships and stuff. You should go to college. And then I was like, might as well?

Lee disclosed the reluctance of going to college during the COVID-19 pandemic but the pressure to go to college from his family. Lee was not the only participant who was encouraged to go to college by family and other external forces.

Uncertainty was a frequently mentioned aspect of self-reflection for the participants. The participants shared about their uncertainty and fear about starting college. Serena stated, *“I was also nervous because I never lived away from home before as most freshmen are.”* Dawn had similar thoughts; she said, *“I was very I don't wanna say reluctant, but I was most definitely nervous, like I knew what I wanted to do so that wasn't a thing for me, but I guess I was just more nervous about like my connections and like How?”* Many participants described being reluctant about their choice of institution. Doug shared, *“I was kinda like a bit scared because I didn't know where I wanted to go at the time because of originally my top choice was [another institution].”* Similarly, Claudia stated, *“I remember choosing [the institution] because it was close to home so if anything happened, I could go straight home ... so I chose open based on the fact that it would be more convenient if to go home if anything went wrong.”* From selecting an institution to anticipating how maneuver in an unfamiliar environment, the participants shared their uncertainty in other areas, too.

The participants' uncertainty carried into their self-reflections about adjusting to the remote summer bridge program. In my analyses, uncertainty and adjustment to a remote program meant adjustment to an online setting and feeling uncertain about the online experience. Many of the participants were unsure how the program was going to be facilitated and administered online. Lee had to shift his expectations of how the program was going to be facilitated. *“Well, from the first like emails and stuff, I was led*

to believe that it was in person. And I'm finding out that it was remote was a was a really big shock. ... And then find out that it was remote, you know, a little bummed out, but still, you know, like optimistic". Claudia reflected, *"At first I was very uncertain because, I was like, how's it gonna work?"* Overall, the participants' uncertainty required them to adjust their expectations of their experience in the summer bridge program.

The adjustment to a remote format involved reevaluating feelings and actions to fit the unexpected demands of remote summer bridge program. Doug shared, *"I know in the beginning I was a bit scared, mainly because as far as we're doing this online."* In other words, Doug was not sure about how this was going to be presented remotely and *because of that, there was some nervousness around that."* Valerie, who had a sibling participant in the summer bridge program in-person, stated, *"I was excited but I was I was also sad just because everything was online I kinda wanted to meet everyone in person."* In other words, Valerie was excited about the summer bridge program in person, but unhappy with the forced remote facilitation.

Personal Growth and Confidence

The next theme that emerged from the interview data was the personal growth and confidence participants gained despite their uncertainty and concerns about the summer bridge program. The participants shared experiences of building their resilience through the program and the academic year. Many of the participants shared that their confidence was planted during the remote summer bridge but nurtured through the academic year. This discovery demonstrates that the summer bridge program, regardless of facilitation, encourages the growth of the participants. Experiences like participating in student

organizations showed the participants they were capable of being resilient regardless of how their college experience was in-person or remote.

As part of this theme, participants discussed how their anxiety about their first year at the institution began to decrease. The participants expressed their initial hesitation and gradual comfort in their first year, especially in social experiences. They may have been reluctant but eventually started to feel at ease with social experiences. Doug shared, *“Yeah, I would say that it helped because I actually have some of those students who were in the bridge program and some of my classes I actually get to see some of them.”* Doug finding friends within the remote summer bridge program participants reduced the uncertainty in connecting with students inside and outside the classroom.

Many of the students interviewed discussed their own confidence, sharing how the remote summer bridge program had an impact on their confidence as students and individuals. The participants expressed an increased confidence and reduced anxiety over their academic experiences their first year. Doug discussed how the program aided in reducing his anxiety. *“I would say the first one would definitely be getting prepared for work because I realized that opening a [the institution’s learning management system], I wasn’t as intimidating seeing like a lot of classes and a lot of like weeks getting listed...”*. In other words, Doug felt comfortable and confident navigating the learning management system because he was exposed to it during the summer bridge program. Discussions on academics specifically will come later in this chapter.

The foundation for students’ personal growth and confidence appeared to take place during the remote summer bridge program. This aspect of self-reflection suggested that participants saw a change at the end of the summer bridge program in how they

participated in the classroom or at the institution. For example, Dawn expressed feeling more confident after the remote summer bridge program. *“I left feeling more confident about going into college.”* The participants felt more confident about taking online classes. The participants continue to discuss their personal growth and confidence in discussing the participants’ overall readiness for college. Claudia highlighted how summer bridge program helped her build more confidence:

It really showed me that was possible. Even though it was going to be difficult, it was going to be a challenge, but it really shown that it was possible to still get all those stuff down and as we can see time does change again and we did it we're kind of back to normal just a little bit.

Really show me it's okay.

Claudia felt the experiences from the remote summer bride program showed that college, even in this challenging time like the COVID-19 pandemic, can be possible. However, the experiences were not the only way summer bridge participants became more confident.

The participants also discussed how they received encouragement from various individuals on campus that fueled their own rise in their confidence. Dawn discussed seeing other summer bridge program participants in class and their encouragement in the classroom helped her become more confident. Dawn shares:

It's like, okay, I know this person we met in [remote summer bridge program]. That's already a familiar face. Like it just gave me more confidence to start a discussion with them in another person like I don't know it just gave me someone to I don't know if bounce ideas off of the

word I'm looking for but there was still like a sense of comfort not that I would like I didn't enjoy engaging with the person I met doing bridge week, but I don't wanna say someone to fall back on.

In other words, Dawn felt a connection with other participants of the remote summer bridge program. The summer bridge program built on the initial interactions that impact participants feelings of not only each other, but themselves. I will discuss more impact on social experiences later in this chapter.

Another aspect of their developing confidence seemed to come from the participants being motivated and open-minded during their first year at the institution. They described having the drive to complete a task while being open to alternative possibilities to completing or observing the task. Serena shared, *“And I found a fulfilling feeling in my life when trying new things... That's why I like to try a lot of new things now.”* Serena’s open-mindedness allowed her to try new student organizations and student employment her first year and beyond.

Part of being open-minded for these participants was getting comfortable being uncomfortable. In particular, students discussed breaking out of their comfort zones throughout their time at the institution, especially in social experiences. Many of the participants shared instances where they were pushed beyond their comfort zone. Lee elaborated on how he had to put himself outside of his comfort zone to connect with people on-campus. *“Yeah, I mean like what I learned from like my first year like only I can change Like what I'm doing, if I had a problem, it's like I can fix it. I don't know.”* The remote learning environment was not the only thing that was uncomfortable at times to the participants.

Students also discussed the area of focus and preparedness as part of the theme of personal growth. Some students specifically discussed being disciplined to be ready and stay on task. The participants first discussed this topic when talking about the impact on their first year at the institution. For example, Lee discussed attendance during his first semester of his first year. *“Well, that's not what I was scared to skip classes. Never had like late assignments or anything. I think eventually once I kind of got the hang of college, I did start skipping and stuff, but you know, like initially, I say for like the first 2, 3 months, like I was too scared to do that.”* In other words, Lee was hesitant to skip classes or not put his best forward; however, he became comfortable at the institution and learned his own way of navigating through requirements. The participants later discussed this concern when looking at their overall college readiness. Doug reflected on how the program maintained high standards throughout their time at the institution. *“So I feel like overall they set the bar for us to be at academically prepared for the entire year.”* The remote summer bridge program helped them stay focused and ready for the challenges of college life.

In general, the participants highlighted to the challenges and growth associated with transitioning to college during a pandemic. The remote summer bridge program played a crucial part in assisting participants to adjust to campus life and build their confidence despite the barriers of the remote learning environment.

Preparation for College

The next main idea that surfaced through the interviews was the desire to be prepared for college. I would argue that the participants were not exclusively focusing on academic preparedness (Strayhorn, 2011), but all aspects of college life. For example,

participants shared these feelings focused that could be applied to the classroom, like staying on an assignment and to experiences outside the classroom, like creating and participating in student organizations. The participants were also wondering if this were going to be their college experience as a whole or if they were ready for what college would be like once restrictions and environment gets back to pre-pandemic states.

One of the central goals of a summer bridge program is to help students feel more academically prepared to start college. It was therefore no surprise that many students discussed different aspects of their academic experiences in the program. The first area was introduction to college life -- exposure to what college could be. The participants expected the remote summer bridge to present this introduction to them. Doug reflected, *"We started college. So here we want to give you like a mini like presentation of how it will go."* In other words, the participants wanted a road map for what the next couple of years would look like.

With college preparedness, the participants received an aspect of the college life. According to the interview data analysis, college preparedness meant not just exposure to college, but a readiness to navigate college life. Many of the participants felt the preparedness when reflecting on whether the remote summer bridge expectations met their expectations. Claudia shared, *"I think ... it really prepared me to see like what it was for you like because it's just like the way how the purposes like we're teaching us online as exactly like I was when we actually started classes here."* In other words, the summer bridge program prepared them for the unique experiences attending university online would provide. Dawn shared, *"If I was going like on a scale from one to 10, I felt. I would say like an 8 out of 10 like I felt ready regarding school like I felt prepared. Like I*

would be able to accomplish.” Dawn felt like she could succeed in the remote environment. Doug stated, *“But I would say overall, yes, it did me my experience when it came to the grades, the work, the events, socialization, all that stuff. I like that hit every single bar.”* The participants felt prepared for what’s to come with attending college online. Lee reflected, *“[Most] of my [college] knowledge is come from like being here and stuff But it kinda like dips your toes a little bit and everything.”* In other words, the summer program provided a foundation for Lee’s experiences

The next area was access to academic resources. I defined academic resources as strategies for success, like time management and organizational skills, especially during their first year at the institution. Doug stated, *“I would say the effect was having good amount of time management...”*. In other words, Doug learned how to work with the time needed for courses. Valerie shared, *“The summer bridge program helped me academically, academically by providing me with resources and materials and making sure that we are like I guess like organized in a way just like. On top of things and just was always there to like help us.”* In other words, Valerie got the resources to stay organized during her online courses.

Academic preparation also emerged in the interviews several times. When I analyzed the interview transcripts, I considered academic preparation to mean any preemptive work that occurred during the remote summer bridge program. Participants noticed the impact of academic preparation through taking part in the program or completing coursework. The first-time academic preparedness appeared was when the participants were discussing their expectations of the remote summer bridge program. Serena shared, *“I was really expecting it to be like it kind of was like class based a little*

bit because it's kind of like a little simulation in a way. It kind of gives you the idea on how classes are supposed to go.” In other words, participants like Serena expected the remote summer bridge program to expose them to what the classroom environment would be like for them.

Academic preparation also emerged as a discussion point when participants were discussing their overall college readiness for their first year at the institution. Doug referred to the remote summer bridge program as well as peer and professional mentoring throughout his first year. Doug shared:

Having you set up a meeting with this person has really helped me overall during the question year, likely, which made me stay on track and receive a high GPA because I would just force myself to like study, take notes, do projects and do all that kind of fun stuff. So I feel like overall they set the bar for us to be at academically prepared for the entire year.

In other words, Doug could build upon his academic preparedness through the meetings with the program staff. Serena stated, *“I think when it helped me academically wise as far as like being ready for college and you know, looking forward to it, I wasn't as nervous As I thought I was going to be. Like as it as it pertained to.”* Participants, like Serena, were not apprehensive of what was to come in the classroom through their time at the institution. Valerie shared, *“It helped me just become a better student and, better at participating. And better of communicating.”* In other words, the participants felt better prepared all around.

The participants also discussed how the remote summer bridge program helped them with their college readiness for online learning that would happen during the school

year. Because the program was held remotely, students learned how to engage in academic activities through online or remote means before having to do so during their fall classes. Participants shared that the experience helped them learn how to navigate online courses. Valerie shared, *“I guess just preparing me to I guess, I don't know, to have classes online.”* In other words, the remote summer bridge prepared the participants for what remote learning would look like in college. Claudia discussed how the summer bridge program helped her with the fall online schedule. Claudia shared, *“I feel like if I didn't do the bridge program then I'll come in that really blindsided because even though you had in high school we had we were online for a little bit.”* In other words, the remote summer bridge program prepared the students for what to expect during the remote learning.

When discussing the impact of the remote summer bridge program had on their academic preparation, the participants discuss their current academic experiences as well. Doug shared how the remote summer bridge program helped him maintain his academics. He said, *“[I got a] good understanding of what needs to be done if you need help because I realize I did need help on certain projects and certain stuff... which I realize is very beneficial.”* Dawn had similar sentiments, saying, *“I feel like it was a a great foundation for sure. I can't say that everything that I learned still resonate or is still at the forefront of my mind, but I feel like it was a great foundation to get me started and keep going.”* In other words, even though the participants may not remember everything specifically, the remote summer bridge program helped to provide a good start to their coursework.

Lastly, academic preparation was some participants' favorite part of the remote summer bridge program. Doug shared, *"My favorite part was both doing the academic work and actually looking at what it will be, actually like to learn at university compared to the high school boards and the high school where there's like a lot of do work now now now versus this one actually get to choose what actually wanted to study and learn from it."* In other words, participants could see the difference between high school and college and what is required of them in the classroom.

The next area discussed was academic rigor and expectations. When I analyzed the interview data, academic rigor and expectations meant understanding what is expected from the instructors and the institution about the importance and expectations, especially during their first-year academic experiences. Claudia shared:

But teachers were still trying to get control of how to even do all that stuff online. So just like, I was fairly still new to doing all my school work online. So, I feel like doing the [summer bridge] program, it really prepared me for what's to come because I feel like if I had started school without any like readiness or preparedness, I probably would have had like a rough first semester.

For Claudia, though the professors were learning how to make the remote environment work, the academic demands were consistent. Doug shared, *"I wasn't as intimidating seeing like a lot of classes and a lot of like weeks getting listed and if I didn't because that's what they had for the summer bridge..."* In other words, the rigor may have been overwhelming if the participants did not partake in the remote summer bridge program.

Students were also concerned with increased academic and professional discipline. This area referred to navigating the expectations professors and other campus

stakeholders had for the bridge participants, especially with their current personal experiences. Lee remembered, *“I was like scared to skip classes and stuff. Because of the [summer bridge program director] ... never once. Well, that's not what I was scared to skip classes. Never had like late assignments or anything.”* In other words, Lee was afraid that not following the rules would get back to the program director. Claudia did not share having that fear but shared the strategies on being successful in college. Claudia stated, *“So just like, I definitely learned, to show my face, like show your teacher that you want to be here, like you actually want to learn how to do it. So that's one thing that really stood out.”* In other words, Claudia learned that to get support from faculty, she would have to display her work inside the classroom and through outside work, like homework.

In addition, students discussed subject-specific preparation. One aspect of this area was students focusing exclusively on math, especially during their first year at the institution. Many students saw the benefits of the specific subject preparation when discussing math experiences. Claudia shared, *“It really helped me a lot with math. I've always struggled with math and I learned that, like even in college, and it's not like in high school..., you gotta stand out or you gotta show that, oh, you wanna learn how to do it.”* For Claudia, the subject-specific preparation helped her get showing that she wants to learn it, even if she may be getting the questions wrong.

Another aspect of subject-specific preparation was writing improvements and expectations. Participants described seeing growth in their writing from the summer bridge program to their first-year writing courses. Writing expectations meant the participants continued with those improvements and to succeed in their current academic

courses. For Serena, the remote summer bridge program was extremely beneficial with her writing courses. She stated:

So, I learned about mostly like within the like the writing portion of it, they taught us like how to, like properly write on like a college level based off of a high school level because in high school, you know, writing and math is different and when it's being taught in like a totally different.”

In other words, Serena improved her writing because she learned that the requirements were different in college than they were in high school. Claudia discussed learning about the writing expectations that were needed in the upper-level writing courses. *She explained:*

I learned it's the work; it's quality over quantity, the amount of pages doesn't matter. The professor really wants to see what you can do with your 3 pages or 2 pages.... Like what information can you get across efficiently and accurately without dragging it on 15 pages. [The remote summer bridge program] really helped me show that.”

In other words, Claudia learned that it is not so much about the page count, but whether she is effectively getting her point across to her professor in her writing. Claudia continued, *“So I think it really helped me like writing like a lot because I did good on all my writing classes here at [the institution].”* Claudia learned to not only appreciate writing, but like it with her improvements and expectations from the bridge program.

Overall, the academic responses demonstrate the remote summer bridge program played an important role in preparing the students academically. The program equipped them with the necessary skills and mindset to succeed in their college experience.

Making Social Connections

The third main idea that emerged from the interviews was the importance of making social connections at the institution. This idea was a frequent point of conversation through the interviews. The participants expressed wanting to feel like a part of the remote summer bridge experience and overall college experience. The participants also expressed the challenges making those connections during remote experience. Though the remote summer bridge program may have provided opportunities to meet people through the program and activity facilitation, participants struggled to find ways to maintain those relationships. Whether it was trying to connect with roommates or participating in student organizations, the participants expressed the unique challenges of socialization that other previous cohorts did not have to navigate. However, when participants saw familiar faces, the participants expressed feeling confident, which leads to another main idea. The participants desired to find connections and though they understood the reason for the restrictions, like sheltering in place and social distancing, the longing for the social interactions did not go away.

Just as important as academic preparation, summer bridge works to help students create and develop social connections. All the students interviewed discussed different aspects of their social experiences in the program. The first issue in this area that they raised was fear and uncertainty about social integration. This area refers to the apprehension participants were feeling in previously mentioned spheres of college, but specifically focusing on the social component; the fear and uncertainty was tied to their initial thoughts about college. Dawn shared her concerns about starting college. Dawn said:

I was going into my freshman year in the year of 2021 and I was very I don't wanna say reluctant, but I was most definitely nervous, like I knew what I wanted to do so that wasn't a thing for me, but I guess I was just more nervous about like my connections and like how? Just I guess how it would interact with the whole new group of people like a new set of people. So, I was most definitely reluctant.

In other words, Dawn was not only worried about finding ways to connect with new people but also how that was going to look like for her. Serena shared similar sentiments as well, stating, *“I was ... a little nervous like with the whole social aspect ... because I got them obviously like when you come into an environment you don't know a lot of people.”* So, for Serena, the potential new environment meeting new people.

These participants expressed particular concerns about developing social connections when their only contact was through the computer. These barriers connecting with individuals online continued during their first year at the institution. Many participants expressed the remote environment being difficult to create connections and maintain relationships through applications like Google Meet. Claudia remembered, *“I made a couple of friends, but I just know that if we were in person I would be able to make more.”* In other words, Claudia felt as if she made friendships, but she could have made more, and they could have been deeper in person. There will be more discussion regarding social interactions later in this chapter. Doug shared, *“I know in the beginning I was a bit scared, mainly because as far as we're doing this online and second, I was just completely new to the school. I didn't know anybody. I think only knew 2 other people ... We're all gonna be in different places. So I just didn't really know anybody.”* In other

words, because Doug did not know many students participating in bridge or attending the institution, this impacted how he felt about ultimately joining the program.

Students also expressed concerns about engagement and participation issues, specifically concerns about virtual activities. Many of the participants felt that they had challenges connecting with others remotely. Claudia shared, *“it's like it was really hard to connect people over; I think we did ... over Google Meet. ... You probably talk to people, but it wasn't like a, it's like more of a on surface thing.”* In other words, Claudia felt that the connections made were not very deep. Dawn also mentioned, *“there's always a disconnect with, information given virtually, especially if with being in a virtual I don't wanna say setting or setup, but just being in that space for so long with school, I feel like it's easy to kind of zoned out or kind of bypass that information.”* In other words, for students to create relationships, they had to be in front of the screen for longer; participants started to disengage after a while. Sustaining the participants' engagement in the social activities appeared to be challenging for the facilitators.

Another aspect of making connections during the remote summer bridge program raised by students was the program coordinators' facilitation of the remote summer bridge experience. The participants stated in some instances, the facilitation was their favorite part of the remote summer bridge experience. Valerie stated, *“Maybe just engaging with students and peers online. That was pretty fun when they were like trying to give like get us to play some games and stuff. Oh, okay, this is fun, even though we're on Zoom, you know.”* In other words, the games played among the student leaders, facilitators, and participants were enjoyable at times. Dawn reminisced about the fun activities done during the remote summer bridge. *“I thoroughly enjoyed the game like it*

was a game that I typically would see or would see like videos of people playing in person, but it worked well remotely.” In other words, Dawn appreciated the unique games presented online. Claudia also shared:

[You] could feel the energy like to the screen so it was really fun like you know like even though because there's other times also limited contact too people were like You know, so just like just like thinking about the little community, like you see something that looks forward to like when you actually do get on campus.

In other words, the facilitation gave participants like Claudia something to look forward to when coming to campus. Participants anticipated the connections with the professional staff and the student leaders to be beneficial considering what they could do with the remote activities.

On the other hand, social anxiety and overwhelm also surfaced, with participants talking about how participants used social considerations as a part of the decision making in joining the program. Valerie shared her experiences navigating her anxiety. She said, *“I knew what to expect, like. Oh yeah, we're going back so I gotta start preparing myself. Thanks. Socially and like, oh I have to socialize now, so yeah. It was a complete change, but yeah.”* In other words, Valerie knew that socialization would come up after the remote learning, but it was an adjustment for her.

Another aspect of social anxiety and overwhelm focused on social anxiety challenges. These were specific situations or experiences tied to social anxiety, especially when discussing if the participants remote summer bridge program expectations were met. Dawn recalled feeling *“more confident about going into college. So my expectations*

for that time or most definitely met. I do. With this, this comes with being how I am, like a socially anxious person.” While Dawn was sharing how the bridge program met her expectations, she remembered one welcome event where she had to navigate her social anxiety in real time. She shared:

I can't remember the exact name of the event but when we did come back and ... I did feel a little overwhelmed. Until I did find that person that I knew that we connected with over the virtual experience, but prior to then like social interaction terrified me still. But that also comes from not being in person with like her in a school setting for like a good 2 years. So, I don't think that anything could have been done better in order to like aid how I felt in that moment. But it was still like a little overwhelming. So, I feel like just the experience helped me kind of get back into the setting of like connecting with people. But in that moment, it was most definitely overwhelming.

In Dawn's recollection of the welcome event, she shared that she was anxious about being around a group of students in person for the first time in two years. Dawn had to find a way to navigate that experience in real time; however, she was thankful for the experience because the event allowed to reintroduce social interactions in person again.

Another aspect of their social responses concerned students' feelings about limited social interactions. Students reflected on the low number of opportunities to interact social in person, especially during the participants first year at the institution. Claudia shared her experiences making connections during her first year. She said:

I made a couple of friends but I just know that if we were in person I would be able to make more. Because it's like it was really hard to connect people ... over

Google Meet. ... You probably talk to people, but it wasn't like a, it's like more a on surface thing. Until you meet the person like in person, it was probably hard for you to um make like a relationship like a genuine one until you get to meet them in person then you can like okay that one.

In other words, Claudia recalled having some social interactions but over the screen she felt the connections and friendships did not go as deep as she would have liked. Lee disclosed his challenges as well. He said, *"Freshman year was definitely like my worst year when it came to like social and all of that. The only people that I did know where like like my roommates and [summer bridge program coordinator]. So, you know, it was pretty limited when it came like my social interaction."* For Lee, his social interactions were limited to the people in proximity, like his roommates. Both Lee and Claudia share wanting more connection during their first year at the institution.

After discussing the limited social interaction participants had their first year at the institution, I found it not surprising that they raised social impact as an issue. I defined social impact as the significance social interactions and relationships played in the participants' lives, especially during their current academic experiences. Lee shared how social connections impacted him. He stated, *"I think it definitely helped as because I'm sure that if I didn't have this I probably would have left. But I did and you know, it kept me going."* For Lee, the impact of social connections was such a vital factor that without it, he would have left the institution. Lee continued saying, *"You know, like, like things aren't going good, but like you're the only one who can change it. And you know, like, definitely got me out of my shell and made me like seize the moment. Cause otherwise I'm sure I would have been just as moopy for the rest of my years here."* Lee

shared the significance social interactions played in his college experience. He shared that the significance carried over into his consecutive years at the institution.

Another element of social connection that participants discussed in their interviews was reduced feelings of isolation during the participants' first year at the institution. In these interviews, reduced feelings of isolation meant that participants did not feel as alone during the shelter-in-place and remote learning than if they did not participate in the remote summer bridge program. Serena being disclosed she felt feelings of being alone during remote classes in her first year. Serena shared how it felt being reassured during her online courses:

So it's like I may be feeling, you know, the same as this person or this person, and just knowing that someone shares your saying thoughts and beliefs on social aspects, being a freshman is like OK, I'm not the only one that thinks that so how that makes you feel like you belong somewhere in a way.

Serena felt like she was not alone in sharing thoughts; she did not feel alone in her online classes. The participants felt they belonged at the institution despite possibly being alone at home taking online summer classes.

Some of the students discussed the challenges of meeting new people remotely. Valerie shared, *"it was hard to like, I guess. Meet new people just because, not everyone wanted to show their face. Through Zoom when we like had classes."* In other words, Valerie found meeting new people challenging because of how people were showing up online. The challenging of meeting new people ties in with the earlier point discussed about making meaningful connections online.

Building from the idea of meeting new people, students discussed the value after their remote summer bridge experiences of seeing familiar faces on-campus. When I analyzed the interview data, familiar faces on-campus meant participants seeing people they may have interacted with during remote summer bridge program during their first year at the institution. Dawn shared how seeing a familiar face impact her in the classroom:

Already knowing someone in the room gave me confidence to speak to someone else because it's like okay I've already made this connection like how many more connections can I make, especially starting off in the dance program. It's like, okay, I know this person we met in [summer bridge program]. That's already a familiar face. Like it just gave me more confidence to start a discussion with them in another person like I don't know it just gave me someone to I don't know if bounce ideas off of.

Dawn used her previous connection from the remote summer bridge program to collaborate, but the connection also gave her the confidence to interact with other students in her degree program. She did it once with positive success; she felt like she could do it again.

These students also discussed their social connections with peers. I defined this area as how participants built relationships with other participants in the remote summer bridge program. The connections helped as previously discussed. Doug continued the importance of the social connections by saying, “*Just get to talk in different students. Peer mentors, members and kind of learning from their experiences was really beneficial and also just I would say just connecting with a whole bunch of people that didn't really*

know was also really fun...” In other words, Doug enjoyed the conversations and learning more about his fellow program participants.

Participants described their engagement with student leaders and peers as their favorite part of the remote summer bridge program. When I analyzed the data, engagement with student leaders and peers meant actively participating in conversations or activities during the remote summer bridge program. Valerie recalled, *“That was pretty fun when they were like trying to give like get us to play some games and stuff. Oh, okay, this is fun, even though we're on Zoom, you know.”* In other words, the student leaders and peers engaging virtually allowed the participants to have fun, even through a screen. Claudia continued stating:

My favorite part was meaning ambassadors like they were really energetic like just to be like I'm sending a living room and you know we can't meet each other by the same time you could feel the energy like to the screen so it was really fun like you know like even though because there's other times also limited contact too people were like You know, so just like just like thinking about the little community, like you see something that looks forward to like when you actually do get on campus.

In other words, even though Claudia was participating remotely, she felt the connection with the peer mentors. For Claudia, if the engagement from the student leaders and peers could radiate through screen, then the engagement would be that much stronger in person.

Some of the students raised the experience of interacting with inspiring role models. In this area, the participants saw peer mentors and other students as encouraging

to explore similar experiences and opportunities. Claudia shared her observations of the peer mentors and other student leaders on campus. She said, *“The [peer mentors] really impacted me like social wise, but they really, they were really out like they were really outspoken. So it really inspired me to be more outspoken and to be more involved on campuses.”* In other words, Claudia saw behaviors from the student leaders that she wanted to emulate. Dawn had similar experiences during the remote summer bridge program. She shared:

[In] one part of the bridge program virtually that helped me was I think we just all sat down and we had like smaller groups and we just talked about our nerves regarding college and some ambassadors, ambassadors gave advice and that made me feel a lot a lot better. So I feel like that was helpful as well.

Dawn could talk to students about recommendations of what to expect as a college student which was helped her in the future.

The engagement from professional staff was another area of social responses to attending remote summer bridge. When I analyzed the interview data, engagement from professional staff meant the actions participants observed or experienced during the remote summer bridge program to connect with the professional staff. Many participants felt the professional staff did their part to connect with them during the remote summer bridge. Claudia shared:

I remember you guys were bring backpacks to go in everybody's houses and stuff like that. I feel like that really a leap that was leaps and bounds right there. And I'm thinking that that right there really helped the students like, okay, again, we're motivated to even start the program.”

For Claudia, when the professional staff delivered supplies to the participants, she felt like that encouraged students to commit to the program. Dawn recalled another example of the professional staff engaging with the students. The following year, Dawn remembered, *“I did like the [parking lot orientation where] we did meet in person prior like to get our bags with all the materials that we would need.”* For Dawn, the parking lot orientation allowed her to meet the staff behind the screen. Dawn saw the engagement from the professional staff which encouraged participation from her. Lee echoed these sentiments by saying, *“And at the end of it, I did feel like, like I had a connection to [remote summer bridge program office]. And I definitely still do.”* For Lee, the efforts presented by the professional staff continues to help him while he is still at the institution.

The participants saw the connection not only from the remote summer bridge program staff, but also the faculty and staff at the institution. Connecting with faculty and staff meant campus partners outside the remote summer bridge program facilitators who connected with the participants. Many participants found different individuals and offices as safe places. Dawn shared:

I felt comfortable with [her appointed financial aid advisor] but when it came to any other new spaces like in offices and whatnot I still did feel a little hesitation or like It was nerve breaking, like even to call the CMI office for the first time.”

In other words, Dawn felt an established relationship with her financial aid advisor which made going to them easier; however, Dawn did not have that same comfortability in other offices on campus.

Another aspect of the theme of socialization that students discussed during their interviews was the sense of community. When I analyzed the interview data, sense of

community meant the connection that was built during the remote summer bridge program. Many of the participants experienced the camaraderie from the program. Serena shared:

I think that going back to the not feeling alone being feeling alone is part of has been like a big part of my life because I can tend to be very antisocial ... I'm not the only one that thinks that so how that makes you feel like you belong somewhere in a way .

In other words, the community Serena felt made her feel less alone, even if she was reluctant to be social within the group.

The sense of community carried into cultural and community engagement. This area meant the participants could experience in events and student organizations tied to identities they wanted to learn more about; this opportunity has impacted many of the participants current social experiences on campus. Claudia shared:

“I want to be part of [Black student organization]. Eventually I did all those stuff like as I went on because I saw a representation of the people. The ambassador and other people, all the student leaders do stuff like that. So then I was inspired to do it.

In other words, Claudia was inspired to participate in culturally relevant student organizations because she saw student leaders participate in them.

Claudia continued her connection with the peer mentors after the remote summer bridge program and now is more involved in the student life on campus. Doug had similar sentiments as well. Doug shared:

I joined the [African student organization] eboard during [my first-year], so I got that connected through CMI, which is really benefits me ... because of that I got to just join different clubs ...and basically like speaking to like a bunch of people. Socially they definitely helped me like kind of break out my shell.”

Doug got connected to an organization that was tied to an identity he wanted to explore more and because of that, he branched outside of his expectations.

Another aspect of social interaction concerned communication. I defined communication as the actions and strategies participants used to connect in the remote environment. The communication tactics had an impact on their current academic experiences. Valerie shared, *“So, I was always like writing to my professors and by doing that that really helped me connect with my professors. And like relationship level and so Yeah.”* In other words, the remote summer bridge program helped Valerie to reach out and connect with her professors. Doug reiterated similar experiences, *“I remember they had like small little assignment residue just how to like properly email professors like hey I need help on this assignment as well that's also beneficial.”* Simply put, Doug learned how to email his professors within the program which became beneficial later within his college experiences. Claudia shared, *“So like I think [remote summer bridge program helped me remain] social because I always been a pretty social person and it really helped me ... know how the tips and tricks, speaking online still.”* For Claudia, she learned how to satisfy her desire to be social within the confinements of the online environment.

In general, the theme of social responses to the remote summer bridge experience showed their uncertainty regarding the social integration of college and the remote

summer bridge program. The participants' uncertainty influenced their decision to participate and engage in the program. Participants noted experiencing social anxiety, especially in virtual formats and the formats' impact on their interactions.

Guidance and Support

The final idea that came from the interviews was the appreciation of the support systems and guidance. Whether the support was coming from the student staff or the program facilitations or other campus partners, the participants valued the importance of the system (Strayhorn, 2019). For example, the participants remembered many of the professional staff made throughout the remote summer bridge program and the academic year, like the on-campus parking lot orientation at the beginning of the summer bridge program. For some of the participants, were not only first-generation college students, but also did not have people who experience college in a remote format. Many participants highlighted the efforts from the student staff as well as other peers about how to navigate the institution remotely. The support was invaluable and added to the students' sense of belonging in the institution and the program, especially because it was essential to navigate this unfamiliar facilitation of college for the participants.

Participants also discussed the impact of direction and guidance on their own ability to make this transition into college. This impact on students, based on their self-reflection, was pivotal considering some of the participants were first-generation college students. Others, like Doug, who had siblings in college or at the institution appreciated the guidance since his siblings did not graduate during the COVID-19 pandemic and other events. Doug shared:

It was just very confusing and I had no real sense of direction even though I asked like my older sister what she would want to do or ask my family members and stuff but I had no real like concrete direction top of that no one in my immediate family has went to OU, so I had nobody to kind of go to but because they helped me like start like here's what's gonna happen throughout those 4 years and very much made me like stay focused and stay in line versus if I just kind of went in chaotically.

For Doug, the remote summer bridge program staff could share tips on navigating the unique demands of the institution. The summer bridge program provided clear guidance and direction for collegiate success.

Many students expressed their disappointment about remote format during the interviews. The participants described their views that the remote summer bridge experience did not meet their expectations or provide the level of support they desired. Lee initially thought he was going to get the opportunity to stay on-campus. However, Lee found out later that the program was online. He recalled, *“And then find out that it was remote, you know, a little bummed out, but still, you know, like optimistic.”* The participants appeared to take the remote pivot in stride, even though they were discouraged about the change.

Students also discussed their appreciation for support system provided within the summer bridge program facilitation office. Many participants acknowledged the support they received to go for opportunities, like Claudia and a competitive scholarship. Claudia shared how her peer mentor helped her apply for it. *“[My peer mentor] kept on telling me*

to do it. So I did it eventually... [My peer mentor] helped me practice for the interview and everything like she was a part of the whole process.” Doug also mentioned the how the support system helped him stay on-track. Doug stated:

[Having to set up] a meeting with this person has really helped me overall during the question year, likely, which made me stay on track and receive a high GPA because I would just force myself to like study, take notes, do projects and do all that kind of fun stuff.”

The participants shared the importance of the on-campus support within the office and how the office encouraged them go for their aspirations.

Despite the participants’ anxiety and apprehension, the participants found support and engagement with fellow participants, peers, student leaders, and professional staff. This support assisted in creating a sense of community and cultural engagement. Participants learned effected communication tips during the program to enhance their relationships with peers, campus partners, and professors. These strategies contributed positively to their overall academic experiences.

Summary of Findings

The review of the critical findings will be divided into existing quantitative data, new quantitative data, and new qualitative data. The existing data was summer bridge participants’ semester GPAs (fall and winter), cumulative GPAs, semester retention, year retention, and surveys regarding program satisfaction from 2018 to 2023. When assessing participants’ GPAs, the data showed the participants had stable fall semester GPAs with peaks with 2019 cohorts and 2022 cohorts and drops with cohorts in 2020 and 2021 due to the COVID-19 pandemic. Winter semester GPAs displayed more variability, with the

lowest being in 2020 cohort semester and peaks again in 2019 and 2022 cohorts. The cumulative GPAs mirrored the trends, again displaying peaks with the 2019 and 2022 cohorts and drops with the 2020 and 2021 cohorts.

The second existing data was retention data. The data showed steady fall-to-winter semester retention rates, with a dip in 2021. The highest semester rate was the 2022 cohort at 95%. The year retention rates were lower, with the highest rates still with the 2022 cohort followed by a projected drop in 2023 cohort.

The third existing data was surveys that were collected during the summer bridge program. These results show high participation satisfaction with the check-in process, events, and overall summer bridge program before the COVID-19 pandemic. The program satisfaction, however, declined during the remote summer bridge program in 2020. There were not results of the surveys for the 2021 cohort. The 2022 cohort's satisfaction improved to pre-pandemic levels but dropped again with the 2023 cohort.

The new quantitative data was completed by 14 remote summer bridge participants; these students participated in the remote summer bridge program in July 2020 or July 2021. The results revealed insights regarding their experiences. Participants rated attributes related to the remote summer bridge program events, online learning, and overall program experience on a scale 1 (strongly disagree) to 5 (strongly agree). Events during the remote summer bridge program got the highest average rating of 3.53, followed by online learning experiences at 3.4. The overall program satisfaction was low at a 2.82 average. Self-efficacy responses were relatively positive with an average of 4.14 overall. There was a high sense of belonging among the participants with an overall

average rating of 4.10. Resilience and academic preparations responses varied, resulting in average rating of 3.45 and 3.96 respectively.

Within the interviews, four major themes surfaced: responses about the remote environment, responses about academics, responses about social experiences, and responses about self-reflection.

Participants expressed concerns about the remote summer bridge program, disappointed with the lack of in-person experiences and feeling uncertain about the overall effectiveness of a remote bridge program. The adjustment to the remote summer bridge program varied from the participants; some felt nervous about the online facilitation while others missed the in-person experience they anticipated. Even with the varied feelings of disappointment and reluctance, the participants appreciated the facilitation efforts from the program coordinators, enjoying interactive activities and felt connected to the office and the institution. The appreciation did not remove the challenges with engagement and participation with the remote format. Virtual interactions felt superficial and difficult to sustain. The remote summer bridge program prepared the participants for navigating online learning. The participants faced some challenges with virtual interactions during their first year at the institution, expressing the want for more connections that were harder to cultivate online.

The next theme concerned academic responses. The participants shared various perspectives related to their transition from high school to college and the academic preparedness of the remote summer bridge program. The participants expected the program to offer an explicit direction for navigating college. What they found out was that they did not receive college instructions, but they received preparation for unique

experiences for attending college remotely. The preparedness helped the participants feel confident in their abilities. Also, the remote summer bridge program complemented their college experiences, giving a foundation for academic success and boosting their discipline and readiness for college-level work. Participants shared improvements in math and writing, learning strategies for success like time management, organizational skills, and understanding faculty expectations. Despite the hesitancy of the remote format, the remote summer bridge. Program played a significant role in improving the participants' preparedness for the academic demands of college.

The next theme concerned students' responses to the social aspects of the program and of college. There were several key ideas related to students' social experience the remote summer bridge program. The participants shared feelings of fear and uncertainty about social integration which impacted their decisions about participating in the summer bridge program. Social anxiety and overwhelm were factors in participating in the program. The participants had limited social interactions and desired seeking social connections with peers, student leaders, student staff, and professional staff. The participants appreciated the support provided from the summer bridge staff and participants. The support made the participants feel a sense of community. The participants also engaged in cultural and diverse activities. The participants developed communication skills also within the remote summer bridge program.

In their self-reflections, participants shared a range of mixed emotions about the remote summer bridge program. The participants shared feeling initially reluctant and hesitant to participate. Many felt uncertain and apprehensive about starting college, especially considering the COVID-19 pandemic's impact on in-person experiences.

Despite those initial feelings, the participants adjusted to the remote format, their initial reluctance shift to comfortability, especially in social interactions. The remote summer bridge program boosted their confidence which helped in reducing anxiety about their college experiences. The encouragement from fellow participants, student staff, and professional staff aided in the sense of belonging, reducing feelings of loneliness and isolation. Participants reported feeling more motivated and open-minded, learning to be comfortable being uncomfortable, especially in areas they may be unfamiliar with. The participants also appreciated the clear guidance provided from the summer bridge program; the direction helped them stay focused and prepared for their college journey.

CHAPTER FIVE

DISCUSSION

Implications of Findings

The purpose of this dissertation was to examine the 2020 and 2021 summer bridge cohorts and their persistence and retention at the institution. Again, these cohorts participated in the summer bridge program remotely during the forced online learning during March 2020 through April 2022. Persistence is measured by examining components of attribution theory, self-efficacy, resilience, and sense of belonging. The sequential mixed methods approach reviewed existing and new data. Existing data was quantitative data, like satisfaction surveys, students' retention and students' GPAs. New data consisted of both quantitative and qualitative data. Remote summer bridge participants from 2020 and 2021 completed a quantitative survey. Then the participants selected to participate in 45–60-minute interviews discussing their experience in the summer bridge program and how it impacted their first and current year at the institution. After I reviewed the critical findings of my dissertation, I assessed the research question to see how the findings helped to answer the question.

Retention

My first research question was “Were the first-year students who participated in the remote summer bridge program in July 2020 and July 2021 retained more than students who participated in an in-person summer bridge program in July 2018 and July 2019?” To provide context to the summer bridge program before and after the COVID-19 pandemic and remote facilitation, I included the retention data for 2022 and projected

retention data for 2023. The average retention of summer bridge participants pre-pandemic (2018 and 2019) was 69.5% for the year retention. For the 2020 and 2021 cohorts, the participants were retained on average of 53% for the year. The decrease in retention in 2020 could have been influenced by the impact of the COVID-19 pandemic. The post COVID-19 pandemic retention, which is 2022 and 2023 cohorts, was an average of 70.5% for the year. In other words, participants were retained at the same rate in-person versus remotely for the semester.

The average retention of summer bridge participants pre-pandemic (2018 and 2019) was 93.2% for the semester retention. For the 2020 and 2021 cohorts, the participants were retained on average 85.6% for the semester. The post COVID-19 pandemic retention, which is 2022 and 2023 cohorts, was an average of 93% for the semester. Across the cohorts, the fall-to-winter semester retention was the most consistent. The consistency indicated that many participants persisted through their first semester across the cohorts. Overall, the rate was consistent for the semester retention and more variable during the year retention.

For the year retention, the post-COVID students were retained slightly more than those who participated before and during the pandemic. The recovery and peak in retention in 2022 may indicate the summer bridge programs' successful efforts with the participants. It could also point to the impact of the external conditions, like removed mask mandates, and decreased restrictions on public gatherings, which could have improved student retention. For example, students may have felt increased comfort on campus because of the reduced mask mandates which contributed to a decision to continue in their program. Overall, the remote summer bridge participants were not

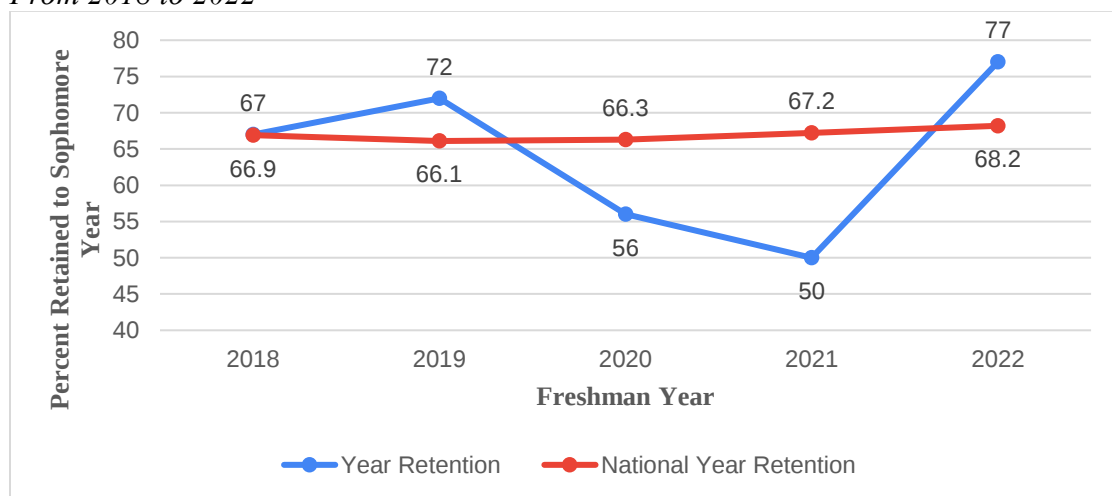
retained more than those who participated in an in-person summer bridge program which was not surprising given the circumstances. However, the decline in retention did not differ substantially, and appeared to rebound when the summer bridge program returned to post-COVID conditions.

Also at the institution, the overall retention for underrepresented students was 62% and for all students was 75% in fall 2022 in the university's official report ([Redacted], n.d.). When comparing those statistics, the summer bridge program is contributing to the success in retaining students at the institution. Though the remote summer bridge participants were not measured against the entire institution, the summer bridge program does their best to litigate the impact on college on participants.

The National Student Clearing House Research Center (2024) showed the retention rates between 2013-2022, including the cohort years I examined. Figure 5.1 compares the national overall retention rates to the summer bridge program's retention.

Figure 5.1

Summer Bridge Participants' First Year Retention with National Average Year Retention, From 2018 to 2022



The overall retention rates for first year students were stable, with a small steady increase from 2019 through 2022. There were no retention numbers yet for the 2023 first-year students. The variability of retention rates for the summer bridge program are exposed when looking at the national retention rates. However, nationally, there is a steady retention of college students with an average retention rate of 66.94%. The summer bridge participants are not too far from the national retention rate at a 64.33%.

Within the discussion of retention rates, I wanted to point out the variety of student experiences was not highlighted. Students were taking on more responsibilities within the pandemic that impacted persistence. The percentage of participants being retained at the institution are not presented in the same light as Douglas and Attewell, (2014)'s results; summer bridge participants were retained better than those that did not participate. However, the students were being retained, despite the challenges highlighted in the participant interviews. The research available on post-Covid levels of retention also indicated that students took on adult responsibilities to assist with the intrusive and increasing demands placed on families during the COVID-19 pandemic (Brooks, 2020; Coe et al., 2022). In other words, even though the retention rates of the remote summer bridge participants were not better or on par than those who participated in-person, the retention rates are at least in part an outcome of the challenges students were facing during that time.

Much of the existing research compared the summer bridge program participants to the rest of the institution's students to measure the program's retention success. However, comparing the first-year students at the institution to the summer bridge program was not the scope of my research. However, when reviewing the existing data

that discussed the remote summer bridge program experience exclusively, the findings supported the existing research. Howland Cummings et al. (2022) stated how the participants were retained differently because of the pandemic. These findings would add to existing data because I assessed and compared the program participants during the remote summer bridge program.

Academic Performance

The next research question inquired, “did the first-year remote summer bridge program participants in July 2020 or July 2021 perform academically on par or better than the July 2018 and July 2019 in-person cohort during the fall and winter semesters?” Again, I included the post-COVID cohorts, 2022 and 2023, to provide more context to the GPA outcomes. The post-COVID cohorts, 2022 and 2023, were included to provide additional context to the cumulative GPA outcomes. Apart from the estimated 2021 cohort cumulative GPA (1.9), all the GPAs are above a 2.0. The lowest, outside the 2021 estimated GPA, was the 2023 cohort with a cumulative GPA of 2.09. This finding suggested that the summer bridge program may need not only to be facilitated in-person but address the new challenges that students face in a post-pandemic college experience. For example, Fawcett (2022) reported that students are struggling with their mental health and academic preparation in math and writing. “For many low-income students and students of color, who have historically faced bigger obstacles to earning a degree, classes seem to be that much harder and graduating that much tougher” (Fawcett, 2022). In other words, these students are struggling to recover academically from the pandemic.

The relatively stable fall GPAs indicated that the students started the academic year consistently. The summer bridge program, regardless of facilitation, provided a good

foundation for the start of the academic year. The only noticeable difference was for the 2021 cohort, who started lower than any of the cohorts before or after. However, the winter semester evidenced challenges which impacted the winter semester GPAs, especially in 2018, 2021, and 2023 cohorts. In other words, the winter semester was inconsistent, making it difficult to determine if the summer bridge program facilitation played a crucial role in the outcome.

With highlighting the remote summer bridge participants specifically, these findings go against the current research. According to Bir and Myrick (2015), summer bridge participants are not only retained at higher rates but receive higher GPAs than non-participants. Though I did not compare the summer bridge participants to all students at the institution, looking at the in-person experiences before and after the remote bridge program, I would argue that the program did well in keeping the students close to satisfactory, which is a 2.0, despite the challenges. Also, the students receiving no credit for non-passing grades and receiving credit instead of grades in some classes may have helped GPAs during the 2020-2021 and 2021-2022 academic years, but I do not know how much it impacted the cohort's semester or cumulative GPAs.

The next question also addressed academic performance. It asked, "other than GPA and retention, how did the remote summer bridge program impact participants on an academic level?" To answer this question, I examined students' perceptions regarding their math and writing courses. The participants reported feeling academically prepared for their math course and for their writing course. When discussing specific courses like math, many of the students saw the benefits of getting specific support. In their interviews, even though the participants were aiming for proficiency, they still felt

supported. Overall, they reported feeling that the remote summer bridge program made an impact on the participants' academic performance.

The remote summer bridge program did impact students on academic levels outside of GPA and retention. These findings coincide with the existing research. The participants did not have an opportunity to visit campus and connect with faculty and academic resources in person, but they were able to navigate the best way possible to receive satisfactory results. These students were prepared for the learning environment shift Howland Cummings et al. (2022) mentioned in their research. Regardless of the facilitation of the summer bridge program, the surveyed and interviewed participants felt academically supported in program.

Personal Impact

The next research question addressed how did the remote summer bridge program impact students on a personal level. The participants were asked about the program's impact personally through the survey and through the interview. In the survey, the participants rated their personal experience improvement at the highest level within that section. In the interviews, the participants expressed the program providing personal growth and confidence during the remote summer bridge program. Though the participants felt moderately about their firsthand experiences through the program, areas like stress management and feeling understood were challenges for the participants. The personal confidence the participants expressed tied into the participants' self-efficacy and resilience.

The participants aligned personal evaluation with intrinsic characteristics, like self-efficacy and resilience, not with extrinsic scenarios such as financial concerns. The

findings regarding the participants' evaluation of the summer bridge program's impact at a personal level, they coincided with existing literature. Caballero and Leung (2023) found the summer bridge participants shared a major increase in their confidence within the engineering program. This finding also echoed other research findings, such as those from Suzuki et al. (2012) and Bevan et al. (2023). Both studies revealed that the summer bridge program participants not only performed better but felt more confident about themselves. Regardless of facilitation, the summer bridge program has an impact on participants' views of their own confidence, self-efficacy, and resilience.

Social Impact

The next question discussed the social aspects and sense of belonging.

Specifically, the questions were:

- What were the experiences of summer bridge participants at a social level?
- Did students have a sense of belonging at the institution?

Discussion of the social aspects was highlighted within the interviews. The participants expressed a great deal of uneasiness and fear about the lack of social interaction. They highlighted the desire to seek more social interactions due to the lack of the interactions. For the students' sense of belonging, participants were asked explicitly about this topic in the survey. The responses indicated that sense of belonging was the second highest response. The participants also highlighted the sense of belonging throughout their interviews. They reported being engaged in cultural and diverse activities; through those activities the students created a sense of community that complemented the decreased social interaction they craved.

One of the interesting findings from the interviews also highlighted the importance of the sense of belonging and socialization. Four out of the six interview participants had exposure to the in-person experience. These students became peer leaders who assisted in the summer bridge program facilitation when the program transitioned to meeting in-person, and there was one student who had a sibling who participated in the in-person summer bridge program. The participants were missing the experience that the in-person participants had and tried their best to recreate that for themselves in an in-person environment.

The high sense of belonging and socialization coincides with the existing research. Even though the participants did not find the remote environment ideal, the sense of belonging was a large factor of the participants not only staying in the program but being retained at the institution (Strayhorn, 2019). Because of the community, the summer bridge program creates, the sense of belonging may be a larger motivator than the institution itself.

Internal and External Attributes for Subsequent College Experiences

The final research question focused on the participants' internal and external attributes and their self-efficacy from semester to semester and from their first year to their second year. The participants highlighted their satisfaction with the program's (external) attributes in three primary areas: events, online thoughts and overall. Some of the attributes carried into the students' perception of their efficacy (internal). The average response regarding self-efficacy was the highest average response throughout the results. The participants reported a high level of self-efficacy throughout their time at the institution.

Although the research questions may not have been identical in other research, the findings in this study were similar. Suzuki et al. (2012) highlighted that the summer bridge participants had a higher sense of confidence, which translated into how they showed up in their courses. The participants may not receive 4.0 GPAs on average, but that is not the point of the program. The goal of the summer bridge program, regardless of facilitation style, is to transition the participants into the campus community by reducing as many external and internal barriers as possible. When examining the participants' efficacy, I would say the program was successful.

Limitations of the Research

In conducting this research, data collection was the largest barrier and limitation to this research. When I examined the existing data, the 2021 cohort did not have the satisfaction surveys completed during the program participation and did not have their first-year cumulative GPA. The 2021 cohort's remote summer bridge program satisfaction surveys would have been helpful to compare with the previous year's cohort as they were also attending remotely. Also, the cumulative GPA for the 2021 cohort had to be calculated by averaging together their fall and winter semester scores. With the satisfactory/unsatisfactory grading options and participants retaking classes, the exact cumulative GPA would have provided a better context to their academic performance during the remote learning period.

The existing data collection was not the only challenge in this area. Obtaining participants to take the survey and to be interviewed proved to be difficult. Many of the participants were outside the required participation in the summer bridge program office. Also, I requested participation after the winter break. There were many demands on the

participants during this time, especially those who were graduating from the institution. Some of the survey participants completed their surveys after visiting the office optionally. More data from the 2021 cohort and survey and interview participants could have provided more refined picture of the how the remote summer bridge program complemented the participants' persistence.

Directions for Future Research

The findings that surfaced through my research will add to the conversation not only about summer bridge programs, but also about remote facilitation of these programs. First, for future research, I recommend performing more longitudinal assessments of the summer bridge program participants. The recommendation is for all former and current participants of the summer bridge program fill out a survey to assess how the program helped them. Hopefully, the findings would show how second-year students may feel about the program versus on seniors or graduates feel about the program. The goal for the summer bridge program is to transition high school students to the collegiate environment. Talking with former participants of the summer bridge program will provide more context on what is working and how to improve on the areas that are not.

Conclusions for the Field

My first recommendation for future research is for the summer bridge program and its facilitators to do more longitudinal assessments of the participants to assess the longevity of the activities and events they put in place during their first year. My conversations with the participants were highly fruitful because they allowed them to share their experiences with this remote summer bridge program long after its immediate impact. It also allowed me to see how the seeds of the program were planted and how

they flourished during their participants' time at the institution. For example, the remote summer bridge program participants did not know they would be building upon their writing foundation in their junior and senior courses. Much of the feedback happened immediately after the program, and students are reflecting on its immediate impact. However, the longitudinal and reoccurring surveys will allow students to think about how that summer bridge program anchored their college experience and how they transitioned into the college environment.

Based on my experiences with collecting data from the participants in the second semester, I recommend that communication go out to returning students about their summer bridge experience at the beginning of the winter semester. They completed an entire semester while also having more bandwidth and space to provide a great context of their experiences and how those experiences in the bridge program impacted them. This communication can go to not just juniors and seniors but also first-year students and second-year students who might be closer to the time they complete their summer bridge program.

My next recommendation for remote summer bridge facilitation is to maintain a sense of belonging throughout the participants' time at the institution, not just during the summer bridge program. While the dropout of winter to the following summer was observed both before, during, and after the pandemic, it became systematically larger in the face of the other stressful conditions. It is difficult to judge, based on participants' responses, how much impact was due to the remote environment and how much was more generally in response to the situation. However, the results point to a need for continued support focused on student belonging as extension of summer bridge.

Strayhorn (2019) stated, "...summer bridge programs are not the panacea for all belongingness needs, and neither should they be" (p. 85). In other words, the summer bridge program, though an excellent foundation for a student's sense of belonging, cannot be the end-all for their sense of belonging. The sense of belonging may be high at the start of the fall semester. Still, I would argue that the student's sense of belonging has significantly decreased because of the lack of transition or connection between the fall and winter semesters. The sense of belonging must be continually nurtured in a variety of ways. For example, facilitators should have found ways to bring the 2020 and 2021 cohorts together in person regardless of their year. In other words, target sense of belonging activities the program would do for first-year students for these cohorts. The participants desired to have an experience like other cohorts, it would have been great for them to have a taste of it, even if they were not first-year students. From the interviews, one of the best aspects of the summer bridge program was connecting with the student leaders and fellow peers. The participants needed more opportunities outside of their first year to experience those connections.

Through the interviews and surveys, I learned the lasting impact the summer bridge program had on its participants. Encourage conversations with summer bridge participants as juniors and seniors to reflect on their time. It was helpful for students to think about how the summer bridge program laid a foundation for their time at the institution; also, it will allow the program facilitators to adjust their program to get their students junior or senior status. For example, as previously mentioned, four of the six interview participants became student leaders after participating in the remote summer

bridge experience. Hearing what they liked about the experience or what they perceived they missed would be essential to review.

Lastly, remote learning will not go away any time soon. Though institutions would like to have students on campus and in person, online provides a unique experience to them (White et al, 2011). The option is now still a modality that is available to students. More than 50% of college students take some online classes in fall 2022 (Hamilton & Swanston, 2024). In other words, the pandemic gave students more exposure to online learning, but institutions back in-person did not eliminate the desire for online courses. The research also supported this. Online learning can provide opportunities like great course access and flexibility (Barber et al., 2021). Institutions must intentionally incorporate remote learning in their strategic plans to stay competitive and attractive to current students (Barcelona, 2009). The summer bridge program could help connect students and the institution with the potential of hybrid and online components of the program.

Summer bridge programs should include ways to embed online components and facilitation outside the pandemic. Jura & Gerhardt (2021) stated, "...particularly as the COVID-19 crisis has further illustrated to colleges and universities the importance of providing quality bridge and similar remote and online courses" (p. 8). In other words, the summer bridge program is an excellent opportunity to expose the students to a different facilitation style. Examples of incorporating an online or hybrid model could be in-person and online components, like meeting synchronously for a lecture or discussion. Incorporating online aspects of the program is vital to help the students transition into college and expand their future possibilities outside the institution.

The remote summer bridge experience not only complemented students' persistence at the institution, but the remote facilitation also complemented them for the future environment. Whether students are in person or remote, these participants can thrive in professional environments more effectively. The summer bridge program not only bridges students from high school to college but also bridges them to several ways to be successful long after completing their degrees at the institution.

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