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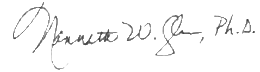
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Doctor of Education in Organizational Leadership



Dr. Nannette Glenn, Dean of
the College of Graduate and
Professional Studies

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Abilene Christian University
School of Educational Leadership

The Effect of Supportive Relationships and a Sense of Community on the Success of First-Year
College Students

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Education in Organizational Leadership

by
Stetson K. Akers
January 2024

Dedication

I dedicate this dissertation work to my family and my university. Both institutions have supported me, invested in me, and encouraged me to pursue this endeavor. To my wife Heather, I am so well loved by you and am so grateful for how much pride you have taken in this work. Thank you for giving me the time, support, and space to complete it. To my boys David and Archer, thank you for being so proud of me as I have been working. It provided me with energy to continue to strive to make you proud. To the rest of my family—Kathy, Dale, Ricky, and Terry—I am blessed by your consistent encouragement and interest in what I have been doing all this time. To my boss Nuria, I will never forget how you created space for me to use this work to inform our office and for our office to inform my work on this dissertation. I plan to return your faith in me with many more years of dedicated work for higher education. Finally, to Tamara Long, I am forever grateful for your confidence in me and the roll you have played in developing our office and myself through the provision for this work. I am truly blessed and fully grateful for the ways all of you have poured into me during this time.

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Abstract

Colleges and universities across the United States actively seek to bring quality students to their institutions and retain them through their course of study while striving to support the successful completion of their degree. The problem is that students face many sources of adversity within their first year of college and leave the institution they have enrolled in before returning for their second year, including financial issues, mental health struggles, and academic success problems. The reasons students leave vary, but it remains important to help students feel connected to the community of their campus while supporting their mental health during an important time or transition in their personal development. The research questions that drove this study are as follows: (a) Is there a significant relationship between a high sense of community in the first semester of college and the retention into the second year? (b) If there is a significant correlation, is there a predictive relationship between a high sense of community within the first semester that controls for the experience of depression and anxiety experienced in the first year of college and their likelihood to retain into their second year? (c) Do higher levels of depression mitigate the effect of a sense of community in student's likelihood to retain into their second year? (d) Do higher levels of anxiety mitigate the effect of a sense of community in student's likelihood to retain into their second year? The participants were 75 first-year students at a Midwestern Christian university who took part in surveys to collect data on sense of community and experience with mental health issues. The data were compared to retention numbers in their second year for analysis. The findings showed no significant correlation between a sense of community, mental health problems, and a student's likelihood to retain into their second year.

Keywords: Sense of community, mental health problems, retention, student success, higher education, first-year students.

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Chapter 1: Introduction

Students are leaving higher education. Because of lower birth rates for the last two decades, there are fewer students coming in to higher education in the first place (Osterman et al., 2022). There are still, however, many students who come to college and choose to leave due to adverse situations (Dahivig et al., 2020; Millea et al., 2018; Morrow & Ackermann, 2012). For the last eight years, I have worked in multiple roles within U.S. higher education. In those roles, as I have talked with students, it has become apparent that students who find success in their course of study anecdotally are also students who have meaningful ties to campus, significant relationships with professors or staff, and who feel supported in their endeavors. Increasingly, students who choose to leave are saying that they are leaving to be closer to home, to go somewhere they already have friends, or are leaving simply because they do not feel like they have a place they really belong. As more and more colleges base success metrics around the ability to retain and the time to graduation, higher education administrators have to be more intentional about the relationships and supports provided to our incoming students. In order to fully engage each student, specific relationships must be built on a foundation of trust, unconditional positive regard, and support for the success of the student (Dahivig et al., 2020; Morrow & Ackermann, 2012)

Due to the decrease in the national numbers of college-bound students, the increase in first-generation college initiatives, and the increased focus on retention as a success metric for institutions of higher education, it is increasingly important to understand the elements of student life and community that increase students' likelihood of academic success and retention within institutions of higher education (Eide, 2018; Millea et al., 2018). The reality is that student success and institutional success are in a symbiotic relationship. In order for students to succeed,

institutions must create an atmosphere conducive to learning and health. For institutions to succeed, students must find academic success and retain through to graduation (Buskirk-Cohen & Plants, 2019; Millea et al., 2018).

The complexity of measuring student experiences is compounded by the number of student demographics and how their backgrounds influence their student experience. In order to make any progress toward improving the student experience with hope of improving student success metrics of retention and graduation rates, it is important to look at just a couple of influencing factors. For this study, sense of community and mental health were two factors in the student experience that I compared to success rates within the incoming cohorts of students to Midwestern Christian University (MCU, pseudonym).

Problem Statement

More and more, colleges and universities are concerning themselves with the recruiting, retention, and graduation rates of students who are successful in their academic programs (Millea et al., 2018). Retention, specifically, is a metric being used to gauge the success of enrollment and academic programs for many colleges and universities across the United States, because students are much more likely to complete a course of study if they retain into the second year of their course of study (Millea et al., 2018; Tinto, 2004). If students who retain are more likely to finish a degree, then it behooves the mechanisms of higher education to find out what elements of the higher education experience are likely to enhance students' success and retention into the second year. This measurement is typically monitored in the university's quality enhancement plan required by many accrediting agencies. For MCU, the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) is the accrediting body that ensures that continued standards of excellence in education are monitored and adjusted as needed

(SACSCOC, 2018). As such, many institutions strive to understand their unique sets of students in order to plan, program, and adapt for the success of the students that matriculate from high school (Millea et al., 2018; Tinto, 2004).

The problem is that an increasing number of students are making the transition from high school to college ill-equipped to handle the stress, anxiety, and pressure of their new academic and social setting (Deneui, 2003; Saleem et al., 2013; Volstad et al., 2020). As a result, students who find themselves overwhelmed by the pressures of academic and social performance often find it too difficult to continue through the adversity and choose to leave their college or university (Millea et al., 2018; Saleem et al., 2013). In fact, modern students are experiencing greater amounts of anxiety and stress than previous generations to the extent that university counseling centers are not able to cover the wide range of presenting issues, having to only focus on the more severe presentations, which prevent day-to-day functionality (Bruffaerts et al., 2018; Saleem et al., 2013).

The transition from high school to college is also a time when students can feel added stress and anxiety resulting from the need for academic performance while also dealing with the feelings of isolation (Deneui, 2003;). Although academic stressors are one facet of the problem, relational issues make up much of the other mental health issues that endanger student retention and graduation rates (Bruffaerts et al., 2018; Buskirk-Cohen & Plants, 2019; Guassi Moreira et al., 2016). Researchers have demonstrated that a sense of community or relational support can mitigate the isolation and academic stress that occur in the transition to college (Buskirk-Cohen & Plants, 2019; Davis et al., 2019; Jorgenson et al., 2018).

A lack of mental health resources, a sense of isolation, and the prevalence of stress and anxiety can be detrimental to students' overall sense of well-being and have a negative impact on

students' academic performance (Bruffaerts et al., 2018). High levels of stress negatively impact academic performance, and academic performance is a key factor in retention. Therefore, it stands to reason that institutions of higher education need to seek ways to reduce student anxiety, increase academic performance, and provide support for students in an effort to improve student retention and graduation rates (Nordstrom et al., 2014).

In this study I intended to shed light on the problem—it is not known if students who feel a sense of community and who develop a sense of resilience improve their retention and graduation rates as a result of engaging with community and resilience-building opportunities in their first year of college enrollment (Davis et al., 2019; Deneui, 2003; Jorgenson et al., 2018).

Purpose of the Study

The purpose of this research was to determine if a strong sense of community and the development of early resilience characteristics correlate with higher retention and better graduation metrics. Key participants were students at MCU, mainly consisting of first-year students. MCU is a small Christian university in the continental Southwest of the United States, which offers undergraduate, graduate, and terminal degrees as a research university designated by Carnegie as an R3 institution. In order to measure those relationships, I employed a quantitative study that sought to determine students' perceived levels of relationships with peers, mentors, and the surrounding communities along with the level of resilience each student possesses. Once I took those measures, the data were compared with the first-year retention rates and graduation timelines for the students' respective incoming cohorts in order to determine if there was a significant correlation between a sense of community, mental health experiences, and the outcome measure of retention for institutional success.

Research Questions

RQ1: Is there a significant relationship between sense of community in the first semester of college and the retention into the second year?

RQ2: If there is a significant correlation, is there a predictive relationship between a high sense of community within the first semester that controls for the experience of depression and anxiety experienced in the first year of college and students' likelihood to retain into their second year?

RQ3: Do higher levels of depression mitigate the effect of a sense of community in student's likelihood to retain into their second year?

RQ4: Do higher levels of anxiety mitigate the effect of a sense of community in student's likelihood to retain into their second year?

Definition of Key Terms

Resilience. The ability of a student to face adversity, academically or personally, and find their way through to overcome that adversity to find success or fail and find their way to success despite the experience (Jenkins et al., 2021).

Retention. The ability of any college student to remain at their chosen institution through their entire course of study. Most institutions emphasize first- to second-year retention as a benchmark metric for overall retention likelihood (Millea et al., 2018).

Sense of community. The feeling or identification of meaningful and supportive connections to peers, staff, faculty, and culture on campus or in the city in which a campus is located (Means & Pyne, 2017).

Student success. A collective outcome that can be determined at individual or collective levels and is measured by specific metrics like retention, graduation rate, and academic performance (Millea et al., 2018).

Supportive relationship. A meaningful and connected relationship where the success and well-being of the student is prioritized, evident, and unconditional (Buskirk-Cohen & Plants, 2019).

Summary

Institutions of higher education are always looking for better ways to recruit, retain, and make timely degree progress for students who choose the institution for the continuation of their education (Tinto, 2004). There are always going to be challenges in the areas of retention and graduation rates. Some of these challenges are controllable; others are outside of anyone's control and occur no matter what institutions do to counteract them. Working to develop a sense of community for students and engaging in intentional relationship with them are ways universities can be intentional in trying to improve students' chances for success (Millea et al., 2018; Tinto, 2004).

It is important to know where to invest collegiate energy and resources in order to insure students are highly likely to be successful in our institutions. There are many elements of higher education that deserve money, time, and energy that could help students find success, and colleges cannot value each of those areas equally. In this research I looked to determine how a sense of community in the first year of college life could impact student success metrics. By engaging in intentional relationship, it is possible to mitigate mental health issues and build resilience. This research intended to build on current knowledge about engaging students'

success and produce valid information to drive modern practices in recruiting, onboarding, and engaging students for ultimate academic success.

Chapter 2: Review of the Literature

It is important to acknowledge that, because institutions of higher education seek to improve retention and graduation rates in any way, there has been much research conducted on ways to enhance retention and student success (Dileepan et al., 2023; Eide, 2018). It is impossible to comprehensively cover every potential risk to retention and graduation. Therefore, I narrowed the focus of the literature review to the problems of the increase of mental health issues in students, students' inability to cope well with failure, and how institutions of higher education might address those threats using specific relational interventions.

Literature Search Methods

Articles for the literary background of this dissertation were gathered from multiple sources. Most of the articles were identified and collected using advanced search in EBSCOhost, the reference lists of the articles found on EBSCOhost, the reference list of dissertations with similar research elements, and governmental databases. The articles culminated to create themes of previous research which both supported this dissertation and validated the need for further research in the areas of student success and retention. Google Scholar was used in conjunction with JSTOR access to other scholarly journals in the collection of literary support for this research.

Increase in Mental Health Problems

Conversations with faculty and staff at any university or college generally reveal a heightened awareness that students at this point in time are experiencing a higher rate, persistence, and depth of anxiety, depression, and stress. It is evident in their class attendance, their grades, and their success outcome measures (Saleem et al., 2013). One complication within this problem is that students' experiences of mental health issues and stress are so individualized

that it is impossible to say that they are a predictor of academic success metrics (Jenkins et al., 2021). Jenkins et al. (2021) found that students who experience high levels of stress have varying ways of interpreting stress. On one hand, stress can be seen as originating from a controllable source, therefore allowing it to be more motivating of good or healthy behaviors. On the other hand, students can also perceive stress as originating from an uncontrollable source and feel unmotivated to make any headway on good behavior for a lack of a feeling of control over their own circumstances (Jenkins et al., 2021). In reality, this research suggests that it is the stress which seems to stem from uncontrollable sources that creates situations in which students feel an inability to cope.

On top of the prevalence of student mental health issues and the inability of typical university resources to address all of those issues, students find other barriers to achieving and maintaining mental health. The World Health Organization recently found that a majority of students who experience anxiety and depression claim that they would not tend to seek professional mental health help; instead they choose to try to fix things on their own or talk with family or friends. Another large group of their respondents claimed they would feel too embarrassed to seek professional help (Ebert et al., 2019). This study confirms that the mindset toward their own mental health issues is predisposed to find other ways of coping than to seek professional help. In an earlier study, Wyatt et al. (2017) found that first year college students are more likely than upperclassmen to report instances of mental health issues. The same study found that upper classmen were more likely to report poor academic performance outcomes related to earlier struggles with mental health. The findings in both studies indicate that intervening with students in their first year to help them normalize mental health issues and find resources outside of counseling clinics can be tremendously helpful when attempting to help

students find academic success despite a higher prevalence of mental health problems (Ebert et al., 2019; Wyatt et al., 2017).

An additional way of knowing that students are experiencing an increase in mental health issues is the rate at which university and college counseling centers are being overwhelmed and underresourced to handle the volume of student need in those areas (Bruffaerts et al., 2018; Saleem et al., 2013). Saleem et al. (2013) noted that most students who experience mental health issues also do not seek out professional counseling or help services. In the context of MCU, students in the advising offices have given multiple reasons for not seeking help from the on-campus counseling centers. One reason is that they find it hard to wait the 3 weeks it would take for a first appointment. Another common reason is that they feel as though they have a handle on their problems and do not need to talk to a professional. Finally, a third common reason given for not seeking help is that they feel bad even asking for help because they feel shame associated with being overwhelmed and stressed. These findings and anecdotes paint a picture of a large issue in higher education, because they indicate that students who have mental health issues are dependent on coping mechanisms outside of professional assistance to counteract the problems that come with mental health struggles. The primary questions that come out of this understanding of student's interaction with mental health are as follows: Which coping mechanisms are students using, and are those coping mechanisms constructive or detrimental to a student's ability to thrive in college?

To further the point, Bruffaerts et al. (2018) noted that there is an increase in mental health issues in first-year college students with as many as 50% of college students experiencing either externalizing or internalizing mental health issues in the first year of college. This study also found that, while controlling for age, gender, and socioeconomic status, the presence of

mental health issues corresponded with a decrease in grade point average between 0.2 and 0.3 points when compared to students who reported no mental health issues (Bruffaerts et al., 2018).

Another consideration for the mental health issues of incoming students is that Bruffaerts et al.'s (2018) research came before the students in the study lived through the COVID-19 pandemic. All of the stressors introduced during that time frame are an additional consideration that has been heavily researched, but results are still being produced because little can be known until outcomes can be measured a couple of years from the onset of the pandemic (Fruehwirth et al., 2021; Gopalan et al., 2022). Since the pandemic began, many studies have been done to assess the effects of lockdowns, supply chain issues, online learning, and general stress and anxiety due to the state of the world during the pandemic. One such study found that the prevalence of moderate to severe anxiety increased from 18.1% before the pandemic to 25.3% once the pandemic was in full effect. Depression rates also increased by more than 10%. Not only are students adapting to new ways of learning in higher education, but they are now also dealing with higher rates of mental health issues than ever before while feeling even more isolated than normal (Fruehwirth et al., 2021).

While Jenkins et al. (2021) found that stress mindsets were not reliably predictive of academic success, they also found that healthy stress mindsets were predictive of the likelihood to have healthy behaviors surrounding their academics and their own health. Therefore, the literature seems to agree that mental health can have an impact on academic success in that healthy habits and mindsets actually drive behaviors that impact academic performance (Jenkins et al., 2021). It is not the struggle of the mental health in the first place that is predictive for academic outcomes, but how a student is able to face it, behave with it or around it, and perform academically despite it (Bruffaerts et al., 2018; Jenkins et al., 2021).

Interestingly, the perceived sources of stress and the beliefs students have about those sources have a large effect on the overall perception of mental health in college students (Hebert et al., 2020). One study found that stress related to grade point average directly ties stress levels to academic performance in a different way than previously mentioned. It is not just stress that has a directional effect on academic performance. In fact, poor academic performance can directly increase stress and anxiety levels in students (Hebert et al., 2020). Hebert et al. (2020) found that fewer than 10% of the participants in their study had indicated that they felt like their mental health was excellent. They also found that more participants who reported days of poor mental health correlated with a negative trend in grade point average across their sample. As students expressed the experience of more intense and more frequent mental health issues, the measure of their academic success tended to show negative outcomes (Hebert et al., 2020). The author also mentioned that the attention to health issues could be a contributing problem due to the time spent in appointments, self-care, and feeling sick. This means that it is not just the experience of dealing with mental health issues that contributes to the decrease in success, but also the time and energy focused on becoming healthier can detract from the resources needed to be successful in general.

Nordstrom et al. (2014) also found that students with lower levels of self-esteem and high levels of social anxiety had a harder time adjusting to life away from home, learning to cope with academic pressure, and were more likely to report other mental health issues as a result. Interestingly, the study also found that as low self-esteem and high social anxiety students continued into their first year, they also reported feeling more confident surrounding their social interactions and academic capabilities. This might indicate that persistence and relationships could mitigate some of the negative effects of high anxiety (Nordstrom et al., 2014).

Stress and anxiety do not simply affect academic performance. These mental health problems can also affect students' abilities to adjust to college life and the autonomy that being a college student can bring (Kroshus et al., 2021; Nordstrom et al., 2014). Another study specifically describes students' experiences with mental health issues in a Christian college context (Klausli & Caudill, 2018). This study found that students on a Christian campus who perceived low levels of support and had an insecure attachment style in their relationships were much more likely than other students to experience high levels of depression (Klausli & Caudill, 2018). In other words, students who feel isolated and a lack of support for their stress can fall into deeper levels of depression than students who feel supported and have good relationships with other people (Klausli & Caudill, 2018).

There is good news, though, in the arena of battling stress and mental health issues for college students, because there are many ways to overcome the adversity that mental health problems present. One study found that, even though anxiety and stress increased over the first year of college, the student's ability to have compassion for themselves in that struggle is a good predictor of their ability to overcome the adversity and succeed (Kroshus et al., 2021). When students can see their struggle and not feel shame or frustration toward themselves, they are more capable of seeing the stress and mental health problems as an externalized and controllable source and are much more likely to either seek help or engage in behaviors and relationships that can help mitigate the negative effects associated with the problems (Hebert et al., 2020; Kroshus et al., 2021).

Transitions to College Are Hard

In addition to the mental health issues that seem to be naturally occurring in college students, the transition from high school and home life to being more autonomous in a college

setting can be really difficult. Students regularly experience homesickness, feelings of isolation, adjustment problems related to their new autonomy, a lack motivation to set or accomplish their own goals, and high amounts of academic stress (Sabaner & Arnold, 2021; Secui et al., 2021). The bottom line is that students find it hard to transition from the support and structure of being at home while going through high school to the autonomous nature of college (Sabaner & Arnold, 2021; Secui et al., 2021). Some students handle the transition better than others, and not all students experience the same level of transition difficulties as others (McCulloh, 2022). First-generation college students, students of minority ethnic backgrounds, and students with academic disabilities can all be at high risk for not retaining based on their experience in the transition to college in their first year (Schelbe et al., 2019; McCulloh, 2022). In fact, when it comes to a sense of belonging, both first-generation students and ethnically diverse students often find it hard to gain a sense of belonging on a college campus. For first-generation students, the lack of belonging tends to stem from the feelings of conflict between their academic and family identities, or from their perceived lack of knowledge about how higher education systems function and the services that are available (Hecht et al., 2021). For ethnically diverse students, the lack of belonging tends to stem from the lack of engagement with communities that hold their values and the lack of cultural connection or involvement on campus (Carter et al., 2019). Interestingly, Carter et al. (2019) found that ethnically diverse students who felt a connection to their cultural community or had a high sense of cultural identity were less likely to use nonmedical prescription drugs. The authors note the strong trend in nonmedical prescription drug use as a coping mechanism for college students. The findings indicate that strong cultural identity and involvement in a cultural community can help mitigate poor coping mechanisms and encourage better outcomes for education and mental health (Carter et al., 2019).

Hecht et al. (2021) suggested that first-generation students find it difficult to assimilate to college due in part to the conflict of the values of independence and their new environment and those of interdependence they experience in their family of origin. The students coming from homes without previous higher education experience have to reconcile their identities given their belonging to two very different worlds that sometimes hold conflicting values. Hecht et al. (2021) described how intervention at the level of that identity to reconcile those values within the person of the student can actually help students become less distracted and find self-actualization in their course of study without losing touch with the identity they find within their own family.

Similarly, students of minority ethnic origins can find it difficult to experience a sense of belonging or community while at an institution of higher education. Gehringer et al. (2021) found that students of non-White ethnic backgrounds and students who identified as first-generation college students were more likely to reenroll in future terms if they experienced a higher sense of belonging or achieved higher GPAs through task mastery. According to the most recent retention data from MCU, the two lowest retaining demographics were Black and Hispanic male students. The next lowest retaining demographic was first-generation students. The data collected by Gehringer et al. (2021) seem to indicate that early intervention for task mastery and the involvement in community at MCU could make a difference in the GPA and overall sense of belonging for first-generation and ethnically diverse students (Gehringer et al., 2021).

Each potential transition hurdle can be significant for mental health, academic performance, and retention. Homesickness has been studied to a great extent in first-year college students. So much so, that many colleges make it a practice to keep students engaged in weekend activities and community events well into the fall semester so students do not return too soon and

decide to not return (Sun et al., 2016). One study looked intently at the phenomenon of homesickness and divulged interesting results in the prevention of detrimental homesickness. First, Sun et al. (2016) noted that homesickness is a common occurrence in most first-year students. They split the experience into two categories: normal homesickness and problematic homesickness. They describe problematic homesickness as a pattern of thought and behavior characterized by constant thought of home that produces severe distress, anxiety, and sadness that can hinder normal functionality in social and academic settings on campus (Sun et al., 2016). They also found that engaging students early in the onboarding process and keeping them engaged in relationships developed a sense of support and community that could mitigate the feelings of homesickness and allow students to find success in their first year (Sun et al., 2016; Morrow & Ackermann, 2012). It holds to reason, then, that a sense of community can play a role in retention in multiple ways, but mitigating distress and stress in the first year is a primary target for building community among entering college students.

Another problem that can cause stress and anxiety in college students entering their first year is the sense of isolation. As previously mentioned, homesickness can cause a sense of isolation. It is important, though, to separate the two problems because isolation is not necessarily dependent on strong feelings of homesickness (Sabaner & Arnold, 2021; Secui et al., 2021). According to Liu et al. (2022) social isolation and feelings of loneliness are positively associated with increased depressive symptoms in both male and female college students. If feelings of isolation and loneliness increase, depressive symptoms can result in behavior adverse to academic success, then feelings of isolation and loneliness in the first year can certainly be a cause for students to leave their university or college. This isolation does not have to be linked to homesickness, but can actually come from a lack of social connection with peers, a lack of

connection with faculty and staff, or a sense of not belonging in the community of campus (Buskirk-Cohen & Plants, 2019; Liu et al., 2022; Sabaner & Arnold, 2021; Secui et al., 2021). It stands to reason then, that developing a sense of community and connection to campus relationships can assist students in academic and social success by helping them feel supported and cared about while they are away from home.

New-found autonomy can also be hard for college students. Most come from a place where they had a family structure to provide for basic needs and functions within their family. These family and community structures also provide support systems for social and academic success. Think of a typical public school in the state of Texas. These schools provide structure for meal security, social accountability, physical exercise, academic success, and clear structures or resources for accessing support systems (Texas Education Agency, 2022). Once students leave the supportive structures of their families and schools, they find themselves in a place where they are responsible for things like doing their laundry, finding meals, making sure they budget time well, and going to class of their own accord. Other pressures students face while transitioning from high school to college come from a burden to succeed academically, the ability to find and use relevant support resources, and the need to do these things on their own (Venezia & Jaeger, 2013). Venezia and Jaeger (2013) also posit that, based on multiple college readiness metrics, college students are not uniformly prepared for the rigors of the transition from high school to higher education. Many supports are available, but not all students know about them, have access to them, nor do they have the social support to normalize the use of academic and social structure meant to help them adapt to life at college (Venezia & Jeager, 2013).

Interestingly, even though there is a wide variety of college preparedness levels for incoming students, there is a common quality that has been shown to help with the transition

(Scott & Donovan, 2021; Venezia & Jeager, 2013). Another study, though, looks at the transition to college less from the lens of college preparation and more from the view of what college students expect in comparison to the reality of their experience. Keup (2007) conducted a qualitative analysis of students' expectations and experiences in their first year and found that students expect to engage in new relationships, delve into their interests for study, and achieve new levels of personal growth in idealized ways. Those expectations do not always meet reality because the process of onboarding and programming the first year of college is not always aligned with how students would prefer to engage those expectations (Keup, 2007). The interviews showed that students greatly enjoyed the freedom and autonomy they found in college, but wrestled with the responsibilities and consequences within those freedoms. Another theme showed a shift from focus on the anticipation of new freedoms and relationships in the initial interview to a focus on independence in relationships to how it affected academic outcomes (Keup, 2007). These themes seem to indicate that the transition to college can also be a time when students have to weigh priorities, make independent decisions, and live the outcomes much more independently than they had in high school.

One could argue, in the realm of college preparedness, that students are ill-equipped for the transition. Research does show that certain character traits or internal predispositions can help students navigate and mitigate stress concerning the successful transition to college. An example is a study that showed students who had a high level of resilience and grit retained at levels higher than students who score lower on those measures (Caporale-Berkowitz et al., 2022). Further, students who experienced academic difficulties were far more likely to retain if they had higher scores of resilience (Caporale-Berkowitz et al., 2022). In another study, the trait of self-compassion has been shown to significantly decrease the stress of the college transition

by allowing students to experience difficulty or failure, while still being able to move forward, learn, and grow into success (Scott & Donovan, 2021). The reality is that there are personal character traits or self-leadership qualities which can help students overcome adversity. The issues of retention and success come into play, though, when those qualities are undeveloped, low priority, or are not the go-to coping mechanisms for adversity and mental health issues.

Mitigating the Effects of Mental Health Issues

Similar to the issue of retention, there is a large amount research on ways of mitigating mental health issues in college students. Common tools for mitigation of mental health issues include professional counseling, medication, mindfulness techniques, and physical exertion. For this study, however, we focus on the relational aspect of mental health. In fact, there is a significant portion of literature that describes the effects mentoring and peer relationships have on students' abilities to cope with stress, anxiety, and the transition to college while succeeding academically in a collegiate atmosphere.

A review of the literature highlights three primary relationships in the discussion of mental health and academic success: mentoring, peer, and family relationships (Buskirk-Cohen & Plants, 2019; Fruiht & Chan, 2018; Guassi Moreira et al., 2016; Kasky-Hernandez, 2020). Each of these relationship types has the potential to contribute in a significant way to the emotional well-being and academic success of college students in their first year. It is important to explore just what these relationships have shown to contribute to students' abilities to succeed and retain in their collegiate endeavors.

Mentoring relationships with faculty and staff in a collegiate setting seem to be the most prevalently studied type of relationship because there can be a direct connection drawn between this type or relationship and student success outcomes. Mentoring relationships have been shown

to make a difference for students by encouraging and enhancing the development of positive psychological characteristics, spiritual growth, professional growth, and academic support (Buskirk-Cohen & Plants, 2018; Priest et al., 2018; Vela et al., 2018; Yoder, 2013). These types of growth through mentoring relationships can be a significant factor in student success and retention.

For example, Buskirk-Cohen and Plants (2018) showed that when a student can perceive that a professor cares about their success, the likelihood of academic success greatly increases. In fact, the students' perception of the professors' level of care makes more of a difference to their academic success than does the student's ability to persevere through academic difficulty (Buskirk-Cohen & Plants, 2018). Although, one could make an argument that this type of perceived support might make a student more likely to persevere in difficult situations, therefore increasing levels of grit in student persistence. In any case, it is evident that when a student understands that a professor is invested in the student's success, positive academic outcomes tend to increase (Buskirk-Cohen & Plants, 2018).

Fruht and Chan (2018) enhanced the argument for relationships mitigating the effects of mental health issues in college students in their study. They describe how naturally occurring mentorship can enhance the success of first-generation college students. The findings showed that first-generation students, a known high-risk student category, were more likely to find academic success when they experienced a mentoring relationship that occurred naturally from their involvement in the life of their institution (Fruht & Chan, 2018). For the purposes of this study, the researchers differentiated between programs assigning mentors to first-generation college students and relationships that came about organically through class work, meetings, and general campus life. They found that students who could develop their own mentoring

relationships rather than having them assigned found more meaningful interactions and were better encouraged to develop a student identity and engage in cognitive development necessary to succeed (Fruht & Chan, 2018).

Further, there is other research that supports the role of academically oriented peer mentoring as a combination of the two relationship types which could support student success (Hall et al., 2020). Hall et al. (2020) highlighted the way peer mentors are able to engage at-risk student populations from a unique stance of recent success and shared experience. When students can identify with someone who has shared a recent struggle and found a strategy for success, this unique relationship can result in a powerful desire to persist and succeed as a result of the encouragement and support of someone who has just done something similar to what they aspire to (Hall et al., 2020).

Relationships in the peer mentoring category are not always as structured as a specific mentor-to-mentee connection. Some universities have leaned more toward intentional learning communities where students are engaged in a small group consisting of various mentors, professors, and peers in a way that links them to relationships and academic engagement. Sears and Tu (2017) describe this type of interaction in their qualitative study of a living-learning community at the University of San Francisco. Students in the Esther Madriz Diversity Scholars program were placed into specific cohorts and the researchers observed their ability to connect to an intentional community while actively trying to apply what they learned of their daily lives in community with other students doing the same things. The study found that students participating in the living-learning community grew an awareness of self, and awareness of others, and connected their studies with their abilities to act as agent of change in their communities (Sears & Tu, 2017).

Quality relationships can also help students move out of the isolation or co-rumination that keep them stuck in mental health patterns and into the supportive behaviors necessary to succeed (Guassi Moreira et al., 2016). Guassi Moreira et al. (2016) found that quality peer relationships helped both individuals involved move out of relational patterns that encourage depressive symptoms and into more healthy patterns of externalizing mental health problems and better coping mechanisms. This type of relationship can also enhance a feeling of belonging through positive feelings from self-disclosure and deepen students' sense of connection and support from their peers (Guassi Moreira et al., 2016).

Further research shows that feelings of support and belonging with faculty, staff, and peers is not the only source of relational support that mitigates mental health issues while enhancing the likelihood of academic success. College students have been shown to need extra support as a result of the prevalent state of transition they find themselves in (Tett et al., 2017; Walker & Raval, 2017). Family and home community relational support has also been shown to make a difference in students' ability to transition, persist, and succeed in higher education (Kasky-Hernandez, 2017). It may seem like a foregone conclusion that students who have the support of their families are more successful in their ventures than those who lack that support. Kasky-Hernandez (2017) takes this a step further and links college students' ability to adjust in healthy ways to their attachment with their mothers. The study found that students who had a secure and healthy attachment to their mothers were more likely to adjust better to college life than those who were insecure coming into college (Kasky-Hernandez, 2017). This means that the way parents interact with and support their children during the transition to college plays a significant role in students' stress levels and abilities to cope with other stress linked to the transition to college (Kasky-Hernandez, 2017; Klausli & Caudill, 2018; Walker & Raval, 2017).

A specific context for this study is the private Christian university setting first-year students come into at MCU. Klausli and Caudill (2018) found that there is a significant correlation between low levels of social support and the rates of depression in college students. The study also found that there was a higher rate of depression in students who felt like they were not actively engaged in their spirituality as they defined it. These findings could show that it is important for students to engage others in spiritual practices that align with their worldview in order to develop a better sense of community that can mitigate mental health issues (Klausli & Caudill, 2018).

Students' Sense of Community and Retention

It seems like common sense to believe that the more connected a student feels to the college community, the more likely they are to stay in the same community. The literature confirms that a student's sense of community is crucial to their likelihood to retain and graduate from an institution. This sense of belonging certainly involves some of the previous literature on the role relationships play in students' academic success (Buskirk-Cohen & Plants, 2019), but other research broadens the scope of understanding to include the student perception of how they fit into the life and function of the university as a whole (Ash & Schreiner, 2016; Davis et al., 2019; Deneui, 2003).

The research seems to point to two elements of belonging in the discussion of students' perceptions and their ability to retain at the institution. The first is the ability for the student to perceive that they indeed fit in the community and life of the university; that there is a place for them to belong and thrive (Ash & Schreiner, 2016; Davis et al., 2019; Means & Pyne, 2017). The second element is the students' perception of the depth and meaning of that sense of community.

In other words, students are looking for ways they fit into a college community and for how well they fit into those same communities (Deneui, 2003; Means & Pyne, 2017).

Davis et al. (2019) specifically studied how a student's sense of belonging on campus could be linked to retention in order to build a useable predictive model for retention. The study focused on the transitional state of first-year college students and how to help them identify belonging on campus as a way to justify leaving home and as a way to solidify their reasons for staying (Bird, 2016; Davis et al., 2019). This research makes the argument that academic success is not the only significant predictor of a student's likelihood to retain and shows that there is a positive relationship between retention and how a student perceives their sense of community, specifically social belonging, that they are involved in on-campus (Davis et al., 2019).

Jorgenson et al. (2018) highlighted another facet of students' sense of community by showing that there is a difference in social belonging and institutional connectedness. Just because a student has friends or good relationships on campus does not mean the student feels as though they fit in the society or culture of campus life. Both relationships and institutional belonging contribute to the students' overall sense of belonging or community on their college campus (Ash & Schreiner, 2016; Jorgenson et al., 2018). Jorgenson et al. (2018) also highlighted that the primary factor in a sense of community is the perception of the students themselves. This means that an argument could be made that institutions are not responsible for helping create a sense of belonging because student experiences and backgrounds are so varied. It seems the research would suggest otherwise by insisting that faculty and staff are highly responsible for developing practices that prioritize individuality, health, and relationships of each individual student while remaining consistent in the identity of the institution (Ash & Schreiner 2016; Jorgenson et al., 2018).

Buskirk-Cohen and Plants (2019) conducted a study to look specifically at the role that student perceptions about professors caring about them play in their own academic success. The study found that low-performing, low-commitment students who perceived that their professors cared about their success were more likely to retain and overcome adversity to succeed academically than the same students who perceived that their professors did not care about their academic outcomes. The same study showed that students' sense of belonging on campus was also a significant factor in their retention and success. This indicates that there is a significant relational factor to academic success for at-risk students, and that the relationships first-year students develop play a significant role in supplementing mental health (Buskirk-Cohen & Plants, 2019).

Professors are not the only relationships that matter in the development of mental health habits or academic performance. Peer relationships can also help mitigate mental health issues while encouraging persistence in academic success. In fact, various types of relationships with peers can enhance academic performance while also mitigating problems arising from mental health issues. For instance, Kern and Kingsbury (2019) found that students who are able to be part of an intentional learning community where students gather outside of class to engage in learning outcomes are twice as likely to persist into the next semester as students who learn independently outside of class.

Peer mentoring has also been shown to help students overcome initial barriers to academic success while finding a sense of community on campus. A study done by Hall et al. (2020) looked into a peer mentoring program at St. John's University and found that students who were engaged in peer mentoring within their field of study generally maintained higher GPAs, retained at a higher rate than other students, and a significantly higher sense of belonging

than those who were not involved in peer mentoring programs. The study also found that these programs need to be specifically structured to encourage mentorship as opposed to tutoring relationships, mentors need to be specifically selected for their relational engagement ability, and participants need to be linked with their mentors early on in the onboarding process (Hall et al., 2020).

Interestingly, the students' on-campus sense of community is not the only type of community that counts in student retention. Walker and Raval (2017) found that the sense of community, specifically for students from rural home towns, involved the support they felt from their home community for going away to college. Students who had little to no support indicated a higher sense of isolation if they did not feel support from their home community. Similarly, first-generation college students can experience gaps in support from home resulting from the lack of active role models or mentors who have walked down the road they are pursuing (Schelbe et al., 2019). Further, parental support for first-generation students is increasingly important. McCulloh (2022) found that first-generation college students found parental support through personal messages, words of encouragement, and personal values portrayed through parental actions to be crucial to their motivation for success. Telephone calls, messages, emails, and regular mail all supported the students' perception of parental support and gave the students motivation to continue in their endeavors in their first year (McCulloh, 2022; Sax & Weintraub, 2014).

Sense of community and mitigation of mental health issues can certainly account for some retention metrics at most universities. It would be foolish, though, to consider those factors as the only ways to improve retention in any institution. Other factors have to be considered in order to ensure the validity of the research on the matters of retention and success. Many studies

have shown that high school GPA and standardized test scores are good predictors of retention in the first year of college (Bowen et al., 2009; Duckworth et al., 2007; Duckworth & Quinn, 2009; Saunders-Scott et al., 2018). The argument could be made that good students tend to persist at higher rates than students who struggle academically (Saunders-Scott et al., 2018). Further, Saunders-Scott et al. (2018) found that grit was a significant factor in students' success and retention within their first year of school. This finding could mean that student grit levels could mitigate academic ability in students who retain and find success in their first year, despite relational support or sense of community.

Another set of studies have focused on the students' connection to various support services. In many institutions, first-generation students and students of diverse ethnic backgrounds have been growing in number for the last 5 years (Fruht & Chan, 2017; Means & Pyne, 2017; Vela et al., 2018). As such, support services that connect with students of diverse backgrounds have been emphasized as ways to engage these students, help them find community on college campuses, and connect to academic success supports within their first year to help bolster retention (Fruht & Chan, 2017; Means & Pyne, 2017). The findings of these studies which focus on specific high-risk groups of students have similar themes for their outcomes. The first is that high-risk student populations need good and intentional support structures to make a healthy transition to college. The second is that relational connection by means of mentorship or community structures with peers is needed to keep high-risk students engaged in the life of the campus and their academics (Fruht & Chan, 2017; Means & Pyne, 2017; Vela et al., 2018).

Spiritual Development's Role in Community Development

Because the context of this study is a faith-based Christian university, it is important to understand the role intentional spiritual development can play in the promotion of a student's

sense of community on campus. MCU strives to engage students in meaningful spiritual development through integrating faith-based conversations into the classroom, offering chapel programming that can be diverse and supportive of various faith competency levels, and offers chances for students to engage each other in faith-based community. The hope is that engaging in spiritual development would produce a healthier student who is more capable of handling the stresses of life, while becoming more founded in their own faith.

There is research to show that this practice and programming are relevant to the success and retention of students. One study worked with students from various public and faith-based universities across the Southeast United States to discover if faith-based practices founded on hope, forgiveness, and mindfulness could be linked to the development of college self-efficacy (Carter, 2022). The results showed that students who engaged in intentional programming that supported spiritual practice and growth in these areas were linked to further development of self-efficacy in college. Further, the study found that it was the practice and intentional growth of the traits of mindfulness, forgiveness, and hope that had a more significant bearing on the development of self-efficacy than the level of spirituality engaged in by students (Carter, 2022.) This could imply that the practice of one particular spiritual tradition is not as important as the support for the practice of spiritual disciplines linked to the enhancement of specific behavioral traits that enhance behavioral and mental outcomes (Carter, 2022). It would then stand to reason, that because spiritual disciplines can be linked to college self-efficacy that it would then also be linked to students' abilities to retain at institutions that support them in such ways (Carter, 2022).

Hall et al. (2016) conducted a study at specifically Christian universities, which found that students within the emerging adulthood category actually experienced a decline in their spiritual lives and the engagement of practices related to their spiritual lives. The authors argued

that the issue at specifically Christian colleges may be that students at these institutions feel a pressure to engage spirituality in a time of self-discovery and engagement, and fight against spiritual practices and disciplines as a result of the pressure. They propose this to be true in juxtaposition to the finding that students at public or nonreligious institutions may feel more free to engage that part of their life (Hall et al., 2016). The results of this study might indicate that the support of spiritual development rather than the expectation of it may be a key factor in assisting students to develop on their own in healthy ways that encourage better outcomes for self-efficacy and success (Hall et al., 2016).

Finally, Dougherty et al. (2022) conducted a study at Baylor University that sought to find out what impact specific university practices in spirituality could reveal about the personal development and character of their students within their own programming. Through this study, Dougherty et al. (2022) found that relationships with friends and peers had the strongest positive influence on spiritual beliefs and practices. The findings also described how favorably students felt about the presence of spiritual mentors who could speak into the development process in positive ways (Dougherty et al., 2022). University expectations and requirements for spiritual engagement actually got mixed reviews with a significant portion of students and alumni reporting that the required portions of the spiritual programming seemed to detract from their spiritual sense of community and well-being. This might indicate that a sense of community is not just an outcome for spiritual engagement but could also be a prerequisite (Dougherty et al., 2022).

Other Factors for Retention

Retention itself is a multifaceted and complex measurement. It seems simple enough to count the number of students who entered a program of study at an institution of higher

education and then compare that list to the students who manage to stay into their second year. It is much harder to explain why students stay (Webber & Ehrenberg, 2010). The reasons students leave are well documented by many studies focusing on facets of the student decision processes such as cost, distance from home, career fit, and culture fit just to name a few (Millea et al., 2018; Webber & Ehrenberg, 2010). Finding out why students stay, though, is a topic that is scarce in the research and dominated by sources that are not as recent as the profession of higher education would prefer (Ryan, 2004).

Student Services

The broad topic of retention, while not unique to any one school, is different in small to mid-sized Christian institutions of higher education. While many public universities rely on low in-state tuition rates that are subsidized by government funding, many smaller private universities and colleges come with a higher price tag for students. Much research has been done, although not recently, on the correlation between how institutions spend their money and how those expenditures affect student engagement and success. The results are mixed.

For instance, Ryan (2004) showed that money spent on student services does not directly correlate to higher rates of student success. Although this study is older, it is representative of similar findings across the realm of higher education. Ryan (2004) conducted the study to ascertain if university expenditures on various areas of student engagement would tie into overall student success and lead to better student persistence and graduation rates. The findings show investing in student services as a whole does not directly affect student retention, but the study did show a positive correlation between investing in academic support and the success rates of student participants (Ryan, 2004). These findings muddy the waters concerning the matter of student engagement and a sense of community by suggesting academic support is more

important than the connection students have to peers and staff. It also draws conclusions that faculty availability and academic support are key indicators of overall student success measured by the timely completion of a degree program (Ryan, 2004).

Not all of the foundational research agrees completely with Ryan (2004). Several studies have shown that when universities invest in student services in general, there is a correlation between that investment and student success measured by degree completion within a six-year time frame (Pike et al., 2006; Webber & Ehrenberg, 2010). With very few current sources for information on the connection between student services and retention and with the variance in agreement on the matter, it is important to understand the mitigating factors in the equation of retention. Pike et al. (2006) approached the topic of disagreement in the research by maintaining that student engagement is a mitigating factor. In other words, campuses who get their students to engage in community and support services are more likely to see a correlation between retention and student services than campuses who do not engage students well (Pike et al., 2006). That being said, there is a large need for more current research that looks into the relationship between student engagement and retention metrics on individual campuses to determine if a sense of community or student engagement is a more direct way of measuring a likelihood to retain.

Cost

The ability to pay tuition, financial aid availability, and the cost of coursework are consistently among the top reasons students state for leaving MCU. According to data collected from MCU's student information system for the spring of 2022, 25% of students who canceled their enrollment for the following fall listed the cost of education or the lack of financial aid availability as their reason for leaving the university. Another way of viewing that data is to say

that 49 students left the university for the reason of not being able to afford the cost of education just within the last semester. That number of exiting students equates to a loss of about \$980,000 per semester.

The problem of affordability is not unique to MCU. Large public universities also struggle to maintain students due to financial aid eligibility and availability. Johnson (2022) showed a link between students who earned financial aid based on merit and their ability to retain at the university as well as their ability to finish their degree on time. Johnson (2022) looked at students who entered college with the highest financial aid packages based on merit and compared them to students who had lower financial aid help. The findings show that the student who are the most at risk are usually also the students who have the highest level of academic achievement prior to matriculation from high school (Johnson, 2022). These findings might indicate that students who have a higher level of financial assistance are more likely to retain at an institution, but the author notes that the students who have those high levels are coming to school with a high level of academic ability and may also be more likely to stay based on their likelihood of academic success. To control for that possibility, the study also evaluated students who lost their merit-based financial aid and found that those students were more likely to leave the university before completing their degree, especially when they were from out of state (Johnson, 2022).

Taylor and Alsmadi (2020) similarly looked at the correlation between institutions ranked highly by *U.S. News and World Report* for affordability with the number of students who received Pell grant funding. The study found that institutions that *U.S. News and World Report* ranked higher also had a lower rate of students who received Pell grants and other federal funding compared to other institutions who enrolled more students with federal aid funding. At

best, this indicated an inequitable scale of affordability for parents and students making decisions about colleges, because the institutions listed as being the most affordable are also the ones where the average family can already afford the cost of tuition based on their income levels. At worst, this ranking misinforms the average American family about potential affordability and college options for their students. The study found that if an institution was more highly ranked in the yearly report, it was also more likely to have a higher price for tuition with less money offered in financial aid (Taylor & Alsmadi, 2020).

In an attempt to add context to the numbers of students citing finances or cost of tuition as the reason for leaving an institution without completing their degree, Van Duser et al. (2020) conducted a qualitative study of students leaving a research institution and found themes related to financial decisions to be a major factor in the decision of choosing an institution to attend and the decision to continue with that institution to degree completion. The study found that students highly consider price before entering the institution, but that students also continually evaluate the cost of attending the institution relative to their academic and professional outcomes (Van Duser et al., 2020). The study did note that the cost of tuition for in-state students was less of a consideration for those students than out-of-state students. Even as such, the topic of affordability determines students' decisions to select an institution of higher education, but also deeply affects their decision to continue their pathway of study until degree completion. If at any point the cost outweighs their ability to perform academically or the value they place in the final degree outcomes, students are much more likely to leave (Johnson, 2022; Taylor & Alsmadi, 2020; Van Duser et al., 2020).

Support for Academic Success

While mental health, cost, and a sense of community can play a role in students' abilities to succeed and finish a degree, academic support systems also play a role in ensuring student success (Grillo & Leist, 2013). Unfortunately, the area of academic support services and its impact on retention in institutions of higher education is another area where very little current research has been conducted. Most of the studies can be found in the late 1990s and early 2000s. Therefore, there is a need for more research into how academic support services might relate to students' abilities to finish their degree programs at the institutions they choose to attend (Grillo & Leist, 2013).

The most complicated aspect of assessing the link to retention from the lens of academic support services is that the services themselves can be linked to academic success, which is then linked to retention. Studies can draw logical conclusions but find it difficult to show a direct correlation between services rendered and retention (Grillo & Leist, 2013). A secondary obstacle to assessing the effect support services has on retention is that it is only possible to gauge student retention for the students who took part in the services to draw conclusions about outcomes for the population of students who actually participated in services and compare those to the retention rates of students who did not (Grillo & Leist, 2013).

Nonetheless, because academic support services can be tied to better academic outcomes, services do have an indirect impact on student likelihood to retain. Grillo and Leist (2013) suggest that students do benefit by accessing and participating in services such as tutoring, learning assistance, and supplemental instruction. Their analysis of students who accessed these services shows that those students did find academic success as a result of participating in the programs listed. Another finding of the same study linked the success of students to both the

participation in those support services and the fact that those services were being delivered by peers (Grillo & Leist, 2013). The finding of the significance of peers leading support services serves to further the previous argument for the importance of peer mentoring in the outcomes of student engagement and sense of community on campus (Grillo & Leist, 2013; Hall et al., 2020; Sears & Tu, 2017).

Applications for Christian Institutions

The measurement of academic success and retention is complex enough by itself, but institutions of higher education that have a specifically Christian identity add more complexity to their mission to educate students successfully. As previously mentioned, developing students in their spirituality can be difficult to do as they enter emerging adulthood, while trying to find self-efficacy in many other areas of life (Carter, 2022; Hall et al., 2016). Additionally, students at Christian institutions of higher education can find expectations and requirements of spiritual engagement to be suppressive on their overall well-being (Dougherty et al., 2022). The question then becomes how Christian institutions can engage the positive elements of spiritual engagement and how those might connect to student retention and success.

Faculty and Staff

It has been shown that spiritual mentorship is held as highly important by students at religious institutions (Dougherty et al., 2022). Therefore, it would stand to reason that the training of staff and faculty on how to engage students in meaningful and formative spiritual mentoring would be a way for colleges and universities to engage students and develop a sense of community, both academically and spiritually (Buskirk-Cohen & Plants, 2019; Dougherty et al., 2022). If universities were somehow able to find ways to connect students to professors, advisors, and other academic staff, students might be able to feel more of a sense of community

as a result of the relationships that are formed (Buskirk-Cohen & Plants, 2019; Dougherty et al., 2022).

If those faculty and staff relationships can help form community for students, recruiting and developing staff and faculty to prepare for meaningful student interactions would be crucial to the process of engaging students in building a sense of community on campus. After all, it would not be possible to facilitate or foster an atmosphere where community grows if there is not an understanding of what community is in the first place (Lewing, 2019). One suggestion comes from a study done on the role that service learning has in developing community for professors and students (Lewing, 2019). The study found that professors do three things to be engaged in service learning in Christian higher education. The first is that faculty, by participating in service learning, uphold and exemplify the desired outcomes and standards of a Christian university. The second is that the professors themselves develop a sense of community among their peers and students. The third is that they benefit the community surrounding the university to develop a better connection between a town or city and the university that sits within it, creating a meaningful bridge between the citizen community and the academic community (Lewing, 2019). This study also found that a crucial part of helping faculty and staff engage in this community-building practice is the need for university administration to appropriately and effectively incentivize the practice as part of staff and faculty development (Lewing, 2019).

Traditions and Campus Life

Another possible way Christian universities can apply community practices for students' benefit is to engage students in meaningful and clear traditions (Trudeau et al., 2019). Trudeau et al. (2019) found that students who felt engaged in campus traditions also felt like those

traditions, explanations, and involvement in them helped them quickly build a sense of community. Therefore, it is important to have traditions but also that those are traditions that have functional roles for any entering students to be involved in (Trudeau et al., 2019). This study also found that the focus on traditions quickly developed a sense of campus culture that allowed students to have a central identity in common with each other that revolves around the membership of the university student group (Trudeau et al., 2019). As such, it is vitally important that Christian universities engage their incoming students in meaningful and clear traditions to develop a sense of community with peers, faculty, staff, and alumni as a means to develop a culture that students can readily identify and connect with on campus.

Success Drives Retention

All of the previous literature seems to point in the same direction. As institutions of higher education focus more on retention and graduation rates as metrics for success, it is important to be more mindful of practices that drive those metrics rather than being laser focused on those metrics themselves (Buskirk-Cohen & Plants, 2019; Means & Pyne, 2017; Millea et al., 2018; Russell & Jarvis, 2019). Student well-being and academic success should be the primary focus knowing that better graduation rates are a byproduct of those efforts (Means & Pyne, 2017; Millea et al., 2018). Student community and support should be the primary focus knowing that retention, within reasonable control, is a byproduct of efforts focused on student wellness and academic success (Ash & Schreiner, 2016; Carter et al., 2019; Davis, 2019). Therefore, universities should put their investment of money, time, and energy into developing student support, wellness, and academic success initiatives to see the returns of higher retention and better graduation rates.

Summary

The reality is that students entering college are experiencing high rates of mental health problems that pose a threat to their ability to succeed and retain into their other years of college (Saleem et al., 2013). Those health problems come from a variety of sources that range from their college preparedness, adjustment to newfound autonomy and responsibility, stress resulting from academic pressure, and general mental health problems that are not related to any of those other issues (Ebert et al., 2019). The problem is multifaceted. Students are experiencing higher levels of mental health problems, university mental health resources are overloaded, and mental health issues can bring about problems for academic performance, which is a source of stress itself. Finally, all of these negative experiences or circumstances can be tied to reasons students fail to retain and complete their degrees.

There are, however, many ways institutions of higher education can help students succeed as they transition from high school to college and learn what it takes to succeed in new and challenging environments (Bruffaerts et al., 2018; Saleem et al., 2013). Students do come to college with intrinsic qualities that are predictive of success and a likelihood to retain, but a good sense of support and community that originates from campus resources and relationships can enhance those qualities while also providing an environment in which students can grow and succeed (Jenkins et al., 2021; Wyatt, 2017). It is important that specific and alternate support systems are provided to complement and enhance the normal mental health resources on many campuses. This means universities need to dedicate the money, human capital, and time to developing and implementing intentional programs that enhance student well-being and a sense of community as soon as students set foot on campus (Dahlvig et al., 2020; Pike et al., 2006; Webber & Ehrenberg, 2010). These structures and practices should be implemented to mitigate

the negative outcomes of untreated mental health issues and reduce anxiety surrounding the college experience. If they are not developed and put into practice, students are less likely to find success (Caporale-Berkowitz et al., 2022; Secui et al., 2021).

Finally, one of the primary issues in the research on the relationships between mental health issues, academic success, students' sense of community, and retention is lacking in recent years. Much of the research that has been foundational is more than 10 years old and may not be as relevant as it would have been before the pandemic and for previous generations of college students. Therefore, it is important to further research intentional relational models as pathways for first-year students to connect to campus in meaningful ways and as resources to overcome the adversity of mental health issues becoming more prevalent in higher education settings.

Chapter 3: Methodology

The goal of this dissertation and research was to assess the relationship between the sense of community, students' mental health status, and students' ability to succeed as first-year students at MCU. Specifically, the findings were descriptive of the population of all incoming students at private Christian colleges. In general, this research sought to describe the interactions of significant relationships and students' abilities to retain to their second year in most four-year higher education settings.

The problem is that students entering college or university in their first year are experiencing higher rates of anxiety and depression, which, in turn, affect the students' ability to succeed academically (Herbert et al., 2020; Millea et al., 2018). When they fail to succeed, they leave the university. The effect can be seen in the numbers for retention and graduation rates across the span of their academic career. Because a longitudinal study is impractical at this time, this dissertation focused on the first- to second-year retention rates in conjunction with a measure of sense of community and mental health to determine if a relationship existed between a student's sense of connection on campus and their ability to succeed well enough to retain to their second year.

To finalize the research and report any findings, I had to address four research questions. First, I had to determine if there was any significant correlation between the level of a sense of community in the first semester of college, the experience of mental health issues, and the likelihood for a student to retain into their second year. Second, if there was a significant correlation, was there a predictive relationship between a high sense of community within the first semester that controlled for the experience of mental health issues experienced in the first year of college and their likelihood to retain into their second year. If there was a significant

predictive relationship in the second research question, I needed to analyze the data to see the separate interactions of depression and anxiety on the predictive model. The goal was to provide significant quantitative data that can help drive enrollment management practices and student success initiatives within the university.

Research Design and Methodology

The intention of this dissertation was to use a nonexperimental, quantitative, correlational design to study the relationship between a sense of community in students and their ability to retain from their first year into their second. The greatest amount of work done in these areas of higher education have generally made use of qualitative designs to conceptualize the stories of how students are able to connect to campus and develop relationships with peers, faculty, and staff. For this study to directly impact the practices of faculty and staff at MCU, though, the previous themes and stories of the qualitative literature must be enhanced by direct numerical data that describe a large portion of MCU students in real time. The reality is that descriptive statistics paint a very detailed picture of a current incoming class, and the power of reliable quantitative research can demonstrate the significance of practices already being implemented while helping leadership define areas of need for the current class of students (Johnson, 2001).

More importantly, this quantitative research was meant to be correlational in nature, because the study sought to take notice of variables that I did not intend to manipulate (Johnson, 2001). In fact, in higher education it is important to quantify the experience of students by observing effective practices and looking for areas of improvement to enhance the student experience and drive best practices for student success (Johnson, 2001). Johnson (2001) also argued that nonexperimental quantitative research helps the higher education community better communicate broad principles stemming from research across a variety of disciplines to drive

meaningful change across each of those disciplines. The key is that quantitative design gives various areas a common language that can account for various theories and methods of practice.

Furthermore, the nonexperimental quantitative model lent itself to finding answers to the two research questions. First, correlational research was a good fit to help determine if there was a relationship between a sense of community, mental health status, and the ability to retain to the second year of school (Lund & Lund, 2013). Once I determined if there was a significant correlation, I could further test to work through a causal-comparative model to determine the directionality and strength of that correlation (Johnson, 2001). These two models fit the plan for this research, because the variables involved in the data were independent and dependent in nature. I could observe correlation, if it exists, through simple data collection and analysis. Causal comparative analysis can be done after that because this study took place over the course of an entire year, culminating in the final determination of retention in the year after participating students entered college for the first time (Johnson, 2001).

One further consideration in the development of this nonexperimental quantitative design was the need to identify what Seeber (2019) identified as objects of comparison. The reality is that I endeavored to understand how a microlevel concept of sense of community was related, if at all, to a macrolevel variable of retention. It made sense that a concept measured in the smaller level of personal experience could be difficult to quantify in comparison to a larger level variable that was measured in multiple ways across the university (Seeber, 2019). While these complicated pieces of the study are discussed in the following sections, it is important to note that quantitative designs and computations are adept at controlling for the differences in variable types through the normalization of data for sufficient comparison (Seeber, 2019). Once I identified the variables, the plan was to run a multiple regression analysis to find the strength of

the relationship, if any existed, while controlling for other known independent factors in the experience of the student (Lund & Lund, 2013).

Materials/Instruments

Following approval from Abilene Christian University's (ACU's) Internal Review Board (IRB), there were three primary sources for data in this study (Appendix A). The first was the Thriving Quotient, which measured student perceptions of a sense of community and well-being (Schreiner, 2010). This measure was the primary means of collecting demographic data. The Thriving Quotient does collect demographic details, such as gender and age, that I used in the analysis of data. The Thriving Quotient is a 35-item measure that codes students' responses based on five themes for the assessment: Engaged Learning, Academic Determination, Positive Perspective, Social Connectedness, and Diverse Citizenship (Appendix B). The measure is a Likert scale instrument that is brief in nature (Schreiner, 2010).

The second measure was the Beck Depression Inventory (BDI) used to measure first-year students' experience with depression (Beck et al., 1996). The BDI is a 21-question Likert scale survey that is scored on a continuum of 1 to 40. Anything below 16 indicated *low to no mood disturbance*. Anything between 17 and 30 was considered to be *mild to moderate depression*. Finally, any score between 31 and 40 indicated *severe to extreme clinical depression* (Beck et al., 1996).

Third, I administered the Generalized Anxiety Disorder 7 assessment to determine if students have experience with anxiety within their first year. This instrument is a 7-item Likert scale survey. A score between 0 and 5 represents *mild experiences with anxiety*. A score between 6–10 indicated *moderate experience with anxiety*. Scores between 11–15 indicated *moderately*

severe anxiety. Finally, scores between 16–21 indicated *severe anxiety*. The GAD-7 has also been normalized on college students (Williams, 2014).

I harvested retention data from the general student data, which are generated semester by semester in MCU's student retention management software. The survey data were presented in de-identified numerical form but connected to retention rates through individual ID numbers assigned to each participant (Ash & Schreiner, 2016). Through the use of individual identification numbers, the data showed if a student retained into the fall of their second year or not.

Research Questions and Hypotheses

RQ1: Is there a significant relationship between a high sense of community in the first semester of college and the dependent factor of retention into the second year?

H1₀: There is a significant correlation between students' sense of community and retention into the second year of college.

H1_a: There is no significant correlation between students' sense of community and retention into the second year of college.

RQ2: If there is a significant correlation, is there a predictive relationship between a high sense of community within the first semester of college mitigate the interaction of mental health issues in order to increase the likelihood of retention?

H2₀: A high sense of community is predictive of students' likelihood to retain into their second year of college in the presence of mental health issues while mitigating mental health issues.

H2a: A high sense of community is not predictive of students' likelihood to retain into their second year of college in the presence of mental health issues and does not mitigate mental health issues.

RQ3: Do higher levels of depression mitigate the effect of a sense of community in student's likelihood to retain into their second year?

H3₀: High levels of depression affect students' likelihood to retain into their second year.

H3_a: High levels of depression have no effect on students' likelihood to retain into their second year.

RQ4: Do higher levels of anxiety mitigate the effect of a sense of community in student's likelihood to retain into their second year?

H4₀: High levels of anxiety affect students' likelihood to retain into their second year.

H4_a: High levels of anxiety have no effect on students' likelihood to retain into their second year.

Population

The population for this study was incoming first-year students at a private Christian university in the United States. Historically, according to enrollment data, incoming classes at MCU range between 800–950 students each year. While each incoming class is different, the incoming classes generally have a female to male ratio of 2:1. Also according to historic enrollment data, incoming classes are about 35% ethnically diverse. Of that 35% the larger part of the diverse population is Latin or Hispanic, then Black or African American, and the smallest percentage of ethnically diverse students identify as Asian or Other. The incoming class represented these same statistics for the most part.

This population is increasingly important and the focus of multiple interventions and retention strategies with the institution. First-year students are seen as the metric for enrollment health for each incoming class and are measured into their second year as a way of determining their success and likelihood to graduate in a timely manner. It is important to understand how the research questions affect the first-year student population at MCU to drive sound practices in enrollment management for this population in the future.

Sample

MCU seeks to enroll an average of 950 new students each semester, and presents the possibility of a convenience sample of the same number of students as are enrolled in their first year. With IRB approval, my goal was to conduct the survey portion of the research in the CORE 110 course that is required for all incoming students that matriculated from high school the previous semester. Due to difficulty in receiving permission to get into all of the CORE 110 classes to collect more data, I conducted surveys primarily in the spring semester. The sample in this case yielded more than 100 students of the more than 900 who were enrolled. Of the more than 100 participants, only 75 fully completed their surveys. Students who were in freshman-specific classes were given the opportunity to take the survey during their spring semester. Once those surveys were complete, the information was converted to a standardized metric to be measured against retention rates of those same students in the following fall semester.

I used G*Power software to determine the appropriate sample size for a linear multiple regression analysis. According to a G*power analysis, the ideal sample size for this study was 75 students. Once the IRB gave approval for the study, it was likely that the number of participants would exceed the necessary threshold for valid conclusions to be drawn by 30% to account for

possible attrition in the study. If the sample size did not meet the requirement of 75 students, nonparametric statistics would have been necessary to make sense of the data collected.

Data Collection and Analysis

I implemented the data collection process in two phases. First, I gave surveys to first-year students in classes and in other academic settings. Students were informed of the purpose of the study and the measure being used in class, and were given time to complete the survey using the Qualtrics survey tool. This allowed for coding each student's response to de-identify the information while allowing it to be associated with retention data later in the study. Each student used their unique student ID at the beginning of their survey so that students could be codified by their identification number and de-identified from other personal information. The information was housed in the Qualtrics database, which is password-protected behind the MCU single sign-on authentication. I distributed the surveys in the last half of the spring semester to give students a chance to transition to campus, establish a routine, and have a chance to establish relationships that could be meaningful given the time they have to develop them (Leavy, 2017).

In the second half of the study, I collected retention points to determine if the surveyed students retained into their second year. I coded students who came back that second year with a 1 and students who left with a 0. Once the retention data was collected and compared to the survey participants, I statistically analyzed the collective data for the purpose of the entire study. All of the retention data were stored in the MCU student retention management software and was also password-protected behind the single sign-on authentication system (Leavy, 2017).

Operational Definitions of Variables

For this study, there were three primary variables. The sense of community was the first independent variable and was measured at a continuous level through the interpretation of the

Thriving Quotient score given upon completion of the survey (Schreiner, 2010). *Depression status* was the second independent variable. This variable was measured by the short form of the Beck Depression Inventory and the answers were quantified as a nominal variable. This variable was a possible moderator. A third variable was anxiety measured by the GAD-7 questionnaire and was also a possible moderator (Williams, 2014). Finally, retention was the dependent variable measured at the ratio level and was measured by the analysis of retention of the first-year cohort into their second year of college (Lund & Lund, 2013; Wu & Zumbo, 2008).

Sense of Community

According to Means and Pyne (2017), a sense of community is a complex measure of student experiences that includes positive interactions with peers, active engagement in social and leadership activities, and campus living experiences. Further, Buskirk-Cohen and Plants (2019) posited that a student's perception of professor caring plays a significant role in their experience on campus. Using these two studies, the active definition for sense of community in this study was understood to be student perception and experience of being meaningfully engaged in social relationships with peers, faculty, and staff that makes them feel as though they have a role in campus life and sense that they belong on campus and in their academic program. This continuous variable was measured using the Thriving Quotient to quantify the student experience of relational aspects of their first year (Schreiner, 2010).

Mental Health Status

For the purposes of this study, levels of depression and anxiety were moderating independent variables. It is understood that students are coming into college with higher rates of anxiety and depression, and that it has an effect on their academic performance, which ties directly to retention (Hebert et al., 2020; Hysenbegasi et al., 2005). In this research, mental

health status was defined by the student's perception of having experienced depression or anxiety to the significance of creating problems in their academic endeavors. I measured these with the two surveys given and coded them as nominal level variables to determine their role in the relationship between sense of community and retention outcomes.

Retention

Simply put, the definition of retention has been described as a student's ability to remain in their course of study (Millea et al., 2018). This study narrowed that definition to be the student's ability to remain in their course of study into their second year at MCU. To determine this metric, I analyzed university data on the first-year cohort of the fall semester in 2022 to determine if the students were able to succeed academically and move on to their second year of school, or if they left the university before the start of their second year in the fall of 2023. This variable consisted of interval-level data pulled from the MCU student retention management software to determine retention rates by class (Lund & Lund, 2013).

Procedures for Data Collection and Analysis

Each student was given an informed consent document that outlined the risks of their participation in the study as well as their option to discontinue their participation or exclude their survey responses. The risk to the students was minimal, but the survey involved their reflection on their own mental health and sense of belonging. This type of reflection and thought could have resulted in feelings of depression, anxiety, or isolation. The disclosure statement included resources for mental health counseling should students have felt they were in need of that resource during their participation in the survey.

Data collection in this study took place in two phases. The first phase was the survey phase of the study and was conducted in the freshman classes and other academic settings, like

the academic advising offices, in order to capture as much information as possible about the incoming first-year cohort in the fall semester of 2022. The survey was distributed by way of the Qualtrics survey engine and distributed by email given a specific link. The student data were de-identified and kept confidential by only collecting their student ID number without collecting names or email addresses through the demographic data in the survey itself. I distributed the survey in the early months of the spring semester.

The second phase of data collection took place in the first part of the fall semester of 2023. This data collection was simple data mining from the MCU student retention management software to determine if the students who took the survey returned for their second year or not. The student numbers collected in the survey were compared to the student numbers of returning students to ensure that the same students who took the survey were the students being counted in the retention analysis for continuity.

Correlation

Once the survey and retention data were collected, I used SPSS to determine if there was a significant correlation between the independent variables and the dependent variable by running the Pearson correlation test to determine the strength and direction of the correlation between the variables. The use of correlation fit was the rationale for the first research question to find out if there was a significant relationship between the two variables. In this case, the correlation was run for both sense of community and students' experiences of depression or anxiety in comparison to retention.

Ordinal Logistic Regression

Once the correlations were run, if there was a significant relationship between sense of community and retention while controlling for depression and anxiety as possible moderators, I

would have analyzed the data using an ordinal logistic regression analysis to create a model of prediction for retention into the second year of school, based on the students' experience of sense of community, depression, and anxiety in their first year. The use of the ordinal logistic regression seemed to be the logical choice for data analysis based on the anticipation that the data collected and the design of the study would meet the four assumptions needed for using the ordinal logistic regression data analysis.

Four Assumptions of Ordinal Logistic Regression

According to Lund and Lund (2013), the first two assumptions needed to use ordinal logistic regression are that there is one dependent variable measured at the ordinal level and that two or more independent variables are being tested at either continuous or categorical levels. In this study, both of those assumptions were true. The dependent variable was retention outcomes and measured on an ordinal level. The independent variables were depression, anxiety, and sense of community assessed through the survey and measured on the continuous and categorical levels.

The third assumption was that the independent variables have no multicollinearity (Lund & Lund, 2013). This means that the independent variables of sense of community, depression, and anxiety cannot correlate strongly with each other. The Pearson correlation test determined early on if collinearity was a problem. I did not anticipate that the three independent variables would demonstrate high collinearity. Similarly, correlation coefficients and tolerance values can be determined in the statistical analysis to determine if the data are in opposition to this assumption.

The fourth assumption was that the study has proportional odds (Lund & Lund, 2013). In order to have proportional odds, each independent variable must have the same effect at each

split of the ordinal dependent variable. This test can be difficult and result in false flags for problems in the study. It is likely that a full likelihood ratio that compares the fit of proportional odds can be run, but may need to be accompanied by a separate binomial logistic regression to interpret the true standing of the assumption of proportional odds.

Researcher's Role

There was potential conflict of interest for the researcher in this study. I, the researcher, did not teach any of the incoming students and did not have any influence in their success in the class in which the researcher planned to implement the surveys. I do advise students who are Accounting or Finance majors and I needed to meet with those students outside of the study setting to help them plan their classes for coming semesters and, potentially, have other conversations about their success and ability to continue in their courses of study. I was a potential stakeholder in the outcome of the study and interested in the students' abilities to succeed at MCU. Being that the interest of the study was student success and the student's responses were coded so as to de-identify students, I am confident that the potential conflict of interest was controlled for. The de-identification of survey responses also allowed for a normal student-advisor role to be conducted outside of the researcher's influence over the study.

Ethical Considerations

For this study, the ethical guidelines put forth in the Belmont Report of 1979 served as the scaffolding for participant and data safety and respect. All data collected were de-identified and stored behind an encrypted single-sign-on process applied by MCU. Because this study was nonexperimental in nature, based on a survey, and participation was voluntary, I determined the risk to any participants to be at a minimum, which is in line with the principle of beneficence. The data from the study are publicly available using the MCU digital commons.

Data collected from the Thriving Quotient were shared with the owner of the quotient in keeping with the agreement for that measure being used in dissertation research. The information shared with the intellectual owner to the measure was also de-identified and only used to further validate the Thriving Quotient measure with Dr. Laurie Schreiner at Azuza Pacific University. All participant-identifying information was kept confidential and will not be shared.

Some students scored high in the BDI and the GAD-7, indicating clinically significant interactions with depression or anxiety. In the BDI, a score higher than 29 indicates severe levels of depression. For the GAD-7, a score higher than 15 indicates severe levels of anxiety. In the case that a student scored in those significantly high categories, the student was given access to their scores and a list of possible mental health resources to help them manage the negative effects. In order to give access, the system used for the survey had a conditional completion message that showed the student their score, explained the meaning of an elevated score, and gave them the information for university counseling centers. This study only measured those interactions, so there was a treatment option offered through the study. It was my ethical obligation as the researcher, though, to ensure participants were given resources for health and healing should the surveys have indicated that the participant may be dealing with high levels of depression or anxiety. This contingency was covered in the consent form and explained to the students who chose to participate in the study.

Finally, there may have been a conflict of interest to disclose to the IRB. I was an employee of MCU as the associate director of advising. Some of the participants were under my advisement during the course of their academic planning in their first year. To control for the potential conflict, I disclosed the role they played to all participants in the disclosure statement prior to participation in the survey. Students were able to freely decline participation in the

survey, so a statement declaring that no student would receive preferential or discriminatory treatment based on their choice to participate was also outlined in the consent form. It was made clear that to prevent any bias from affecting the study or the professional relationship between advisor and student, student responses were de-identified before I was able to view any specific responses.

Assumptions

The primary assumption of this research remained in the use of the Thriving Quotient as a self-report measure. As such, I assumed that students reported their experiences in an authentic and honest way. In the instructions and disclosure of the measure and study, I explained the survey and the importance of answering in an authentic and honest way. A secondary assumption was that there are other factors, such as physical health and financial capacity, which can affect the dependent variable of retention. This study sought to find the relationship between two such factors and retention as a whole, while acknowledging that there were other ways to increase retention in first-year students. The sample of students was assumed to be representative of other incoming cohorts within the same generational and educational frameworks. It was important to reach the G*Power goal to ensure that the sample is representative of the population.

Limitations

The primary limitation in this study was the voluntary participation of students. Only students who participated in the survey could be included in the final analysis to determine the effect on retention. The overall university retention rate may have been different than that of the survey participants. Another limitation in this study was that time only allows for the study of one incoming cohort. It would have been ideal to be able to study multiple cohorts of incoming students in a longitudinal model to draw more informed conclusions. A more minor limitation

for the study were issues with the survey format and technology. This was controlled for with the survey being given in an in-class environment where professors and I could help answer questions to avoid issues with respondents' answer selections.

Delimitations

This study only ventured to determine the role a sense of community, depression, and anxiety played in the determination of retention outcomes at MCU. The goal was to draw conclusions about how meaningful relationships and mental health interact and impact a student's likelihood to retain from their first year of school into their second. Conclusions could not be made about further retention or about other cohorts of students at other institutions of higher education. Replication would need to take place to draw similar conclusions about similar populations in other academic settings. While I collected data on basic demographics, I did not use demographic data itself as variables in this study.

Summary

This chapter outlined the methodology and considerations for a study to determine the relationship between first-year students' sense of community, depression, anxiety, and retention into their second year at MCU. The goal was to utilize a nonexperimental quantitative design to determine those relationships and draw conclusions about the possible predictability of retention based on the correlations of the variables. I selected participants based on their status as a first-year student in the fall of 2022. I gathered the data first by a survey and then compared that to the retention numbers available in the student retention management system that is maintained by MCU. Once I collected those data points, I ran the multiple regression analysis using SPSS.

This study was intended to provide sound quantitative data that would develop a rich context for the practices of enrollment management at MCU. It was my hope that the results

would help guide and direct the initiatives and outlooks for the success of first-year students on campus for years to come. In the case where significant data were found and validated, suggestions would have been made for how to enhance practices on campus to account for helping students develop a sound sense of belonging. In the case that it was found that the variables did not have a significant relationship to retention, it would indicate that the attention and resources of campus officials, faculty, and staff could be diverted to other determining factors of retention. In any scenario, this research should help guide MCU toward more efficient and more powerful models of student success in the near future.

Chapter 4: Results

The goal of this study was to gain understanding of the possible link between a student's sense of community on campus and their likelihood to retain into their second year, despite the experience of depression and anxiety. Students responded to a survey to indicate a level of their sense of community and their experience with depression and anxiety. Those numbers were then compared to the students' rates of retention into the next year of their academic programs.

The purpose of this chapter is to explore the statistical analysis of the survey data. The chapter is organized in the following segments: review of the research process, analysis of the data collected, the effect of the results on the initial research questions, and summary of the chapter.

Summary of Research Process

I used a quantitative approach in this study. A survey was used to collect data from the students, which included the Thriving Quotient, Beck Depression Inventory, and the GAD-7 Inventory (Appendix C). All three measures have been normed for the population of college students and confirmed as valid measures of the variables of thriving, depression, and anxiety (Beck et al., 1996; Schreiner, 2010; Whisman & Richardson, 2015; William, 2014).

Surveys were sent out to the entire class of first-year students. Students responded voluntarily and their data were protected through HIPAA compliant data storage using the Qualtrics survey software. Once participants completed all surveys, any incomplete survey data were removed from the study, and all identifiable student data were de-identified to make their responses quantifiable, but anonymous for the protection of student information. Out of 101 survey participants, only 75 completed the entire survey. Therefore, the data reflect a sample size of 75 students. The surveys were distributed and completed in the spring semester of the

students' first year, and retention data were collected from the university data system after the 12th day of classes was complete during the first semester of their second year to ensure retention data were complete and accurate.

Data Analysis and Results

The survey consisted of 115 items in which students responded to Likert scale questions to the best of their knowledge based on their own experience. All three measures are self-report, and the survey was designed to be a one-time survey with a comparison to retention data based on the participants who responded. Out of 75 total respondents, 49 were female, 25 were male, and one chose not to identify gender. This ratio is consistent with the makeup of the population of MCU with a 2:1 female to male ratio in the entire residential student body. The summary of descriptive demographic statistics for the sample are listed in Table 1 and 2.

Table 1

Gender

Demographic	<i>f</i>	%	Valid %	Cumulative %
No Answer	1	1.3	1.3	1.3
Female	49	65.3	65.3	66.7
Male	25	33.3	33.3	100
Total	75	100	100	

Table 2

Age

Demographic	<i>f</i>	%	Valid %	Cumulative %
18–20	73	97.3	97.3	97.3
21–23	2	2.7	2.7	100.0
Total	75	100.0	100	

Each measure had a different scale in which a score was collected. For instance, if a student retained at the institution, they were given a code of a 1 and if they left the institution, they were given a score of 0. I coded the scores for the BDI and GAD-7 based on the normalized scores determined by the measures, respectively. Finally, I coded the community score based on the Likert scale from 0 = *no sense of community* to 6 = *high sense of community*. The descriptive statistics for the scales are represented in Table 3.

Table 3

Descriptive Statistics

Variable	<i>N</i>	Minimum	Maximum	<i>M</i>	<i>SD</i>
Community	75	1	6	4.57	1.153
Depression	75	0	36	10.76	8.744
Anxiety	75	0	20	6.21	5.192
Retention	75	0	1	84	0.369
Valid <i>N</i> (listwise)	75				

Once all data were in and the retention data were collected, I ran a bivariate correlation to determine if there were any significant directional relationships between the variables (Table 4). The results of the bivariate correlation show no significant relationship between any of the independent variables and the dependent variable of retention. The one significant relationship shown in the correlation is a strong positive correlation between the independent variables of depression and anxiety. Because there was no correlation found in the variables, the assumption of correlation needed for continuing to the ordinal logistical regression was not met and the regression analysis could not be run.

Table 4*Correlations*

Variable		Community	Depression	Anxiety	Retention
Community	Pearson Correlation	1	-.07	-.03	-.04
	Sig. (2-tailed)		.53	.79	.76
	<i>N</i>	75	75	75	75
Depression	Pearson Correlation	-.073	1	.72**	-.04
	Sig. (2-tailed)	.532		< .001	.75
	<i>N</i>	75	75	75	75
Anxiety	Pearson Correlation	-.032	.72**	1	.12
	Sig. (2-tailed)	.785	< .001		.32
	<i>N</i>	75	75	75	75
Retention	Pearson Correlation	-.036	-.04	.12	1
	Sig. (2-tailed)	.762	.75	.32	
	<i>N</i>	75	75	75	75

Note. **Correlation is significant at the .01 level (2-tailed).

Research Questions

The research questions that pertain to this study are as follows:

RQ1: Is there a significant relationship between a high sense of community in the first semester of college and the retention into the second year?

RQ2: If there is a significant correlation, is there a predictive relationship between a high sense of community within the first semester that controls for the experience of depression and anxiety experienced in the first year of college and their likelihood to retain into their second year?

RQ3: Do higher levels of depression mitigate the effect of a sense of community in student's likelihood to retain into their second year?

RQ4: Do higher levels of anxiety mitigate the effect of a sense of community in student's likelihood to retain into their second year?

RQ1 is answered because there was not a significant correlation between the independent variables and the dependent variable. Because RQ2 was dependent on a significant relationship being found in RQ1, the answer to RQ2 is that there is no predictive relationship that can be reliably drawn between a student's sense of community and their likelihood to retain into their second year. Furthermore, it cannot be said that a sense of community controls for the experience of anxiety and depression in the prediction of the likelihood to retain. As for RQ3 and RQ4, depression and anxiety were not found to have a predictable effect on students' likelihood to retain into their second year, because there was no significant correlation between the variables of depression and anxiety and those of community and retention.

Summary

The goal of the study was to determine if there was a significant correlation between a sense of community and students' likelihood to retain into their second year where the sense of community could mitigate mental health issues to increase students' likelihood to retain in a predictable way. The study was able to collect data from the number of students needed for the threshold of the previously determined for the needed sample G*Power at an *N* of 75. The findings after analysis show no significant correlation; therefore, a predictive relationship cannot be determined. Given that there is no correlation and no predictive relationship, the null hypothesis for all research questions needs to be rejected.

Chapter 5: Discussion

Retention in any institution is a multifaceted measure of institutional success (Buskirk-Cohen & Plants, 2019). There have been many studies looking for the magic formula to perfectly predict what can control the rise and fall of first- to second-year retention rates. None of these studies, however, have found the perfect predictor or the one factor that would make students, as a whole group, more likely to retain than if any one factor had not been controlled or presented. In my experience in higher education, I see students leave because they feel homesick, are not able to afford the cost of school, or lack friendships. Some also leave because they want a bigger school or a smaller school. And some leave for mental health reasons, physical health reasons, and for reasons they will not or cannot explain in any way (Millea et al., 2018). It is also true that students are increasingly experiencing mental health issues during their college year and finding fewer official resources, such as counseling centers, to manage those experiences. This complicates their experience and ability to succeed socially or academically (Bruffaerts et al., 2018; Ebert et al., 2019).

Despite the complicated nature of retention as a measure, this study sought to find a connection between one area of student experience and the likelihood a student would choose to return to school for a second year. Based on the literature, it seemed like a logical hypothesis that if students felt connected to the community on campus, they would be more likely to retain than students who did not feel a significant connection to the campus community. The focus of the study was to measure and analyze the student experience of community, along with their experiences with mental health, to see if that community could overcome mental health struggles to help them return and continue their courses of study. In this chapter, I discuss the meaning of the data as it pertains to the relationships of each variable to the others, pose further questions

that come from the results, and propose limitations of the research itself and their potential impact on the results.

Summary of Results

During the data collection process, surveys were voluntarily taken by first year students. The initial sample included 101 students, but only 75 participants completed the surveys. Once the surveys were complete, the BDI and GAD-7 inventories were scored according to each measure's validated rubric. The surveys were completed in the spring of the students' first year of college. Once the surveys were complete, I collected the retention data by comparing the students' responses to the indicator of the student being fully enrolled and participating in person on campus at MCU.

Once I had collected all data, I ran statistical analyses to find the connections between the variables. The first test was a bivariate correlation to see if there was a significant correlation between the sense of community variable and the dependent variable of retention. The goal, if there was a correlation, was to see if the relationships could be predictive by using an ordinal logistical regression measure to see if a sense of community could control for depression and anxiety in a predictable way for retention. The initial correlation, however, did not show a significant relationship between variables, so the regression could not be run. Therefore, the measure failed to reject the null hypothesis. As a result, only two conclusions can be drawn from the data. The first is that retention was not significantly affected by a sense of community in a reliable way. The second is that there was some other factor or many other factors that may be better predictors of retention than a student's sense of community in their first year on campus.

There was a strong positive correlation between the independent variables of anxiety and depression. Other studies have confirmed the relationships between the two mental health

diagnoses, but this correlation shows the positive relationship between depression and anxiety remains true in the sample of students from MCU. Simply put, when a student experiences either depression or anxiety, they are also likely to experience the other to some extent (Klausli & Caudill, 2018; Kroshus et al., 2021; Mendels et al., 1972).

Discussion of Findings

While almost every researcher hopes to find meaningful evidence of the hypotheses driving their research, every outcome can help draw conclusions based on the variable being studied, which can then help drive further research and other outcomes in the field of study. In this study, the findings showed a lack of significant relationship between the independent variables and retention. There are multiple conclusions that can be drawn upon reflection on the relationships between each variable, but the overarching conclusion deserving discussion is the fact that a sense of community does not seem to significantly impact the likelihood of students to retain at MCU. While this finding presents some disappointment, the reality is that it does still contribute to the research and thinking driving the retention efforts in higher education.

Retention and Sense of Community

The first comparison worth discussing is the primary goal of the study; retention in relationship to the sense of community reported by the survey participants. While there was no significant correlation between the two factors, there are still relevant inferences to be made that can be used to inform current actions at MCU. The primary conclusion drawn from the failure to reject the null hypothesis is that other factors impact retention more than a sense of community.

As previously mentioned, retention is complicated and is based on many factors. In the data from this survey, it is evident that students who did feel connected to the community of the campus left. Inversely, students who reported not feeling a strong sense of community retained

into their second year. Using the data for cancellations from MCU, students most often cited cost, academic fit, fit/culture, and location as the top four reasons students chose for leaving before the fall of 2023 (Appendix D). Of those four reasons, cost almost doubled the frequency of any of the others. Another notable data point is that of the 164 responses, 104 students only listed one reason for cancellation and 60 listed multiple reasons. Of the 104 students who recorded a single reason for leaving, the reasons of cost and academic fit accounted for 41 of those responses. Cost was given for 24 responses, while academic fit was given for 17 responses, accounting for 25% of all of responses. This means that students identified cost of attendance and academic success as the two most common single factors for leaving MCU before the fall of 2023.

These data seem to validate the findings of this study that other more significant factors determine retention than a student's sense of community. That reason, listed as fit/culture in the cancellation form for MCU, was only given as a singular response by 14 students and was included as a reason for a total of 18 more. In none of those 18 responses was fit and culture listed as the primary reason for leaving, but was still a consideration. This could mean that students do consider their sense of community when deciding to leave, but that there are other more significant factors in weighing whether or not to stay or leave the university.

Retention and Mental Health Issues

Interestingly, the mental health issues of depression and anxiety had no significant correlation with retention. As discussed in the literature review, college students are experiencing greater and more frequent instances of depression and anxiety. Mental health issues can impact academic performance, social environments, and engagement with mental health services (Ebert et al., 2021; Jenkins et al., 2019; Wyatt et al., 2017). It would make sense that mental health

issues could impact retention indirectly if it reduces a student's ability to succeed in classes or meaningful relationships. In the survey population, though, even the students who experienced clinically significant levels of anxiety or depression retained at a similar rate as the students who did not experience mental health issues at high levels. Similarly, there were students who did not express any significant depression or anxiety left the university before their second year.

For the population at MCU, these results can mean a couple of things. First, even though mental health issues are on the rise in college students, there are other more significant factors that determine a student's likelihood to retain. This does not mean that the university can ignore mental health issues, though. Given the increasing rate of students experiencing mental health struggles, it is more important than ever to invest in support and services to help student cope with those challenges while they find success in the classroom and in life. It should be noted that the whole health and well-being of the students is important through the entire time a student is with the university. Attention to their mental well-being and the ways that impact other success metrics should not be limited to the first-year retention rate.

Second, when the correlation results are put in the context of the students who did cancel enrollment for the fall, the numbers show that less than 12% of students who left the university cited mental health issues as contributing to why they left. It could be that the current support systems for MCU students in mental health areas are sufficient. It might also be that students who are experiencing mental health issues do not feel that those experiences are creating a level of distress or interference to keep them from finding success in their academic program and social areas of their college career. In either scenario, both academic and mental health support resources should remain a priority for MCU to continue serving students well in the future.

Sense of Community and Mental Health

The last correlation the data analysis looked at was the connection between the two independent variables of mental health issues and the students' self-reported sense of community. The correlation showed no significant relationship between a sense of community and the experience of mental health issues for MCU students. It is possible that students who felt well connected to the community at MCU were able to overcome mental health issues through the use of community, mental health support systems, or their spiritual resources. In any scenario, it does not seem that students' mental health statuses are a significant hinderance to finding connection on campus.

The ramifications of this finding could mean that the social atmosphere of MCU is already conducive to helping students feel connected to campus activities, faculty, staff, or their own peers. It should be stated that current efforts may be producing good results for student connection, but they should be continuously evaluated and adapted to current student needs as each incoming class of new students evolves with new trends and values in higher education. Remaining current in student trends and desires for interaction inside and outside of the classroom is going to remain as important as it ever was to recruit and retain students at MCU.

In my experience at MCU talking with students, they often cite the *MCU difference* as a reason they want to stay even when they cannot for other reasons, such as cost or academic performance. Anytime I ask them what they mean by the term, they say something to the effect of how they feel how much both faculty and staff care about them as people. They can tell how much their professors and support staff want to support them, connect with them, and help them succeed if at all possible. It seems like connection is being done well as MCU. Even though it is

not enough to control the financial and academic success variables of the retention equation, it does make MCU a harder place to leave from an emotional standpoint.

Limitations

Every study runs into factors that limit the conclusions that can be drawn from the resulting data or limit the ability for the study to be run in all the ways that allow for the best representation of the full population being studied. For this study, multiple factors limited the study and impacted the final data. Even though the sample size was significant related to the population, the complicated nature of the variables, the lack of time to study the sample, and other factors outside of the study itself impacted the study.

Record Retention

One of the most surprising and limiting factors for the study was that MCU retained students from their first to the second year at a historically high level. According the MCU institutional research, the first-year retention rate hit 79.5% as of the 12th day of classes in the fall of 2023. This is the highest first year retention rate in the last 10 years.

For MCU, this retention rate comes from a multitude of factors. The institution has put into place several initiatives specifically intended to impact retention. Student life created a leadership program meant to engage students deemed to be at risk to not retain with relational and developmental programming. Another initiative targets financial risk for student of diverse ethnicities on campus to try to boost retention of students within minority groups on campus. There are also multiple departmental efforts within the various colleges to engage students within their own college to help them find academic success and mentoring within their specific fields of education. Of specific note is that students who were undeclared, often identified as

high risk to leave, retained at an 83% rate into their second year due in part to a more intentional and engaging career development model in the advising and career services office.

All of this is an incredible mark for MCU as a whole because it shows that the collective efforts of faculty and staff have moved the needle toward their 5-year goal of an 85% first-year retention rate. In the context of this study, though, the increase of retention would have made it difficult to find a correlation between the variables. If students' sense of community and experience with mental health issues remained similar to other years, but retention metrics increased substantially, this particular cohort may not be representative of the population. To tell if the first-year retention rate for the fall of 2023 affected the outcomes of the study, more data would be needed from a larger sample across a longer amount of time.

Small Sample Size

Although the sample of the study reached the determined G*Power size at 75 participants, it is possible that there were insufficient data from the sample and that correlations could not be determined. The total incoming class for the 2022-2023 school year was 894. In a perfect world, the entire class would be able to participate in the study to draw conclusions about retention for the entire incoming class. In this instance, more respondents could have created a more robust dataset, so one of two outcomes would have produced more confidence. The first possible outcome could be that there still would not be a significant correlation, but the confidence in the lack of correlation would have produced more reliable conclusions. The second possible outcome could be that more data would allow correlations to become more apparent if they existed. The aggregate of more data points would allow for better conclusions to be drawn about the population at MCU.

Variability in What Drives Retention

The variables that affect retention of college students are many. In the decision to conduct this study using the variables I chose, I was well aware that the data would be limited by the number of variables I was comparing against retention to draw conclusions about the first-year student population at MCU. The limitation that most affected the study seems to be the many factors that affect the metric of retention. On top of the variety of factors, each class is different in the way they embody those factors.

One example of a variable that could affect retention is financial in nature. One class of incoming students may be more financially capable of staying for their second year than a class that comes behind them. Even within that financial difference for incoming classes, one class may be dealing with a better economy than another class behind them. Scholarships and financial aid could be better for one class than another. Furthermore, the actual price per tuition hour can change from class to class. This example just highlights several aspects of one other variable not accounted for in the study. There are likely multiple variables that have similar complexities that could limit the scope of any study that focuses on the effect of just one or two others on the overall scope of retention.

Time

The hard reality of dissertation work is that meaningful research needs to be restricted by the timeline of the progress of finishing a doctoral degree. As such, it is not always possible to take the time needed to gather as much data as possible or run a longitudinal design. In this study, the research was limited to one year for the gathering of data and completion of the data analysis to present the findings in a timely way. Having more time to gather data and compare samples could produce more meaningful conclusions.

Recommendations for Future Research

Having concluded the study and reflected on the results, limitations, and meaning of the data, there are several suggestions for future research on retention, mental health, and sense of community in first-year college students. First, similar studies should strive for a larger number of participants to gather data that may be more descriptive of the total population. In this study the population was the total incoming class of the 2022-2023 school year. The sample was 75 total students. It would be beneficial to expand the study by taking more time for data gathering and recruiting participants. It might also be beneficial to provide incentives for participants to complete surveys to avoid having incomplete data that must be discarded.

Second, future researchers might want to consider running a longitudinal design and a comparison of multiple samples using an analysis of variance to look into as many variables that affect retention as possible. The starting point might be to use the data generated by the cancellation reasons given by students to describe why students do not retain. Then, future researchers could find ways to describe reasons students stay and compare the two groups to draw more solid conclusions about how students decide to stay or leave the university.

My third suggestion for future research would be to do a similar study but expand it to include a qualitative segment and produce a mixed methods study. While time would still be a significant limiting factor, the qualitative data from retaining and nonretaining students could provide rich context for the numeric data. Especially in the absence of correlation or predictive regression models, the student experience can draw themes that would help provide a meaningful background for institutional programs and policy moving forward. It would be wise to collect the data for the reasons students leave and then analyze the most common reasons to help students avoid being faced with those problems in their first year. It might also allow the institution to

identify students who are truly at risk and focus their efforts on resolving the issues for those students with early intervention.

Conclusion

This study sought to provide a statistical context for the efforts to boost student retention and mitigate rising levels of student mental health problems on the campus of MCU. Using a quantitative model based on student survey data and comparisons to the first-year retention data, the study did not find a significant correlation between students' sense of community that would mitigate mental health issues and make it more likely for them to retain.

Although the data did not return results that allowed us to reject the null hypotheses, the data help to further the study of retention at MCU and across higher education. While confirmed correlations and a full predictive model would have driven policy and programming in specific directions, the lack of those outcomes still allows the institution to be directed in their practices of developing their recruiting and retention efforts by focusing on other facets of retention for first-year students. It is encouraging that students do feel connected and cared for on the campus of MCU. It is also important to move forward by studying other factors that impact retention in the first-year populations that enter the institution to provide the best experience and care for the students that trust MCU with their education and development.

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Appendix A: IRB Approval

Date: 4-21-2023

IRB #: IRB-2023-16
Title: The Effect of Supportive Relationships and a Sense of Community on the Success of First-year College Students
Creation Date: 1-24-2023
End Date:
Status: Approved
Principal Investigator: Stetson Akers
Review Board: ACU IRB
Sponsor:

Study History

Submission Type	Initial	Review Type	Exempt	Decision	Exempt

Key Study Contacts

Member	Robert Hausmann	Role	Co-Principal Investigator	Contact
Member	Stetson Akers	Role	Principal Investigator	Contact
Member	Stetson Akers	Role	Primary Contact	Contact
Member	Stetson Akers	Role	Investigator	Contact
Member	Robert Hausmann	Role	Investigator	Contact

Appendix B: Permission to Use Thriving Quotient

Permission to Use the Thriving Quotient™ for Research Purposes

By signing below, the researcher utilizing the Thriving Quotient™ (TQ) instrument or data from the Thriving Project agrees that such use will be governed by the following principles and agreements made with Dr. Laurie Schreiner, owner of the instrument and the data ("owner"):

Use of the Thriving Quotient™ Instrument

This Agreement allows the undersigned researcher to use the Thriving Quotient™ solely for research purposes. The researcher agrees to (1) administer the instrument in accordance with standard research protocols that protect human subjects; (2) provide the owner of the instrument information regarding the administration process, response rate, and timeline of the research project; and (3) protect the items on the instrument as the intellectual property of the undersigned owner.

If a researcher collects data using the instrument independently (not through the web registration process at www.Thrivingincollege.org), such researcher agrees to provide Dr. Laurie Schreiner (lschreiner@apu.edu) with a de-identified copy of the data collected, in an Excel or SPSS file, within 120 days of data collection. The researcher also agrees to provide Dr. Schreiner with a copy of the report created to summarize the findings.

A copy of any manuscript submitted for publication is to be submitted to Dr. Laurie Schreiner at the point that it is submitted for publication. Such submission to the owner is for information purposes only.

Protection of Individuals

The undersigned researcher will not release or disclose, and will take all necessary and reasonable precautions to prohibit others from releasing or disclosing, any information that directly or indirectly identifies individual participants within the data.

Limitations on the Disclosure of Data and Safeguards

I, the undersigned researcher, acknowledge and affirm that I am personally responsible for compliance with the terms of this Agreement, to the exclusion of any other party, regardless of such party's role in sponsoring or funding the research that is the subject of this Agreement.

I will ensure that the data are kept in a secured environment and that only authorized institutional users will have access to the data.

I acknowledge and affirm that interpretations, conclusions, and/or opinions that I reach as a result of my analyses of the data sets are my interpretations, conclusions, and/or opinions, and do not constitute the findings, policies, or recommendations of Dr. Laurie Schreiner or Azusa Pacific University.

I agree to acknowledge in all reports, publications, or presentations based on these data that the source of the data is the "Thriving Project at Azusa Pacific University under the leadership of Dr. Laurie Schreiner."

My signature indicates that I understand the terms of this Agreement and that I agree to comply with its terms.

Signed: Stetson Kent Albers
 Date: 3/28/21
 Print or Type Name: Stetson Kent Albers
 Title: Doctoral Candidate
 Organization: Azusa Pacific University
 Address: 5500 PI
 City: Azusa State: TX ZIP Code: 79601
 Phone: 512 439 9528 Fax: _____
 E-mail: skalbers@apu.edu

The information above is maintained by the Thriving Project only for the purpose of enforcement of this Agreement.

Signed this 28 day of March, 2022

Laurie A. Schreiner

Laurie A. Schreiner, Ph.D.

Owner and Copyright Holder of the Thriving Quotient™

Appendix C: BDI and GAD Scoring Instructions

Interpreting the Beck Depression Inventory (BDI):

Add up the score for each of the 21 questions by counting the number to the right of each question you marked. The highest possible total for the whole test would be sixty-three and the lowest possible score for the test would be zero. This would mean you circles zero on each question. You can evaluate your depression according to the table below.

Total Score Levels of Depression:

0–10 = These ups and downs are considered normal

11–16 = Mild mood disturbance

17–20 = Borderline clinical depression

21–30 = Moderate depression

31–40 = Severe depression

over 40 = Extreme depression

Interpreting the Generalized Anxiety Disorder Survey (GAD-7):

This is calculated by assigning scores of 0, 1, 2, and 3 to the response categories, respectively, of “not at all,” “several days,” “more than half the days,” and “nearly every day” for all 7 items.

GAD-7 Total Score Level of Anxiety:

0–4: minimal anxiety

5–9: mild anxiety

10–14: moderate anxiety

15–21: severe anxiety

Appendix D: Cancellation Numbers

Figure D1

Cancellations for Fall 2023

	Total Cancellations	Single Reason	Multiple Reasons
Fall 2023	164	104	60

Figure D2

Single Reason for Cancellations for Fall 2023

	Cost	Academic Fit	Total
Fall 2023	24	17	41
% of all Cancellations	15%	10%	25%

Figure D3

Cancellation Reasons for Fall 2023

	Cancel Reason(s)*	Frequencies
Fall 2023	Academic Fit	35
	Cost	60
	Fit/Culture	33
	Athletics/Scholarship Athlete	31
	Family Issues	19
	Mental Health Issues	19
	Location	32