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Bellarmino University, bryan.hamann10@gmail.com

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Exploration of Sense of Belonging Phenomenon for Students Who Commute to Campus at
Private, Not-For-Profit, Four-Year Institutions

by

Bryan Patrick Hamann

A dissertation submitted to the Faculty of
The Annsley Frazier Thornton School of Education
Bellarmine University

In partial fulfillment of the requirements for the degree
Doctor of Philosophy for Leadership in Higher Education

May 17, 2022

Bellarmino University

The Undersigned Faculty Committee Approves the

Dissertation of

Bryan Patrick Hamann

Exploration of Sense of Belonging Phenomenon for Students Who Commute to Campus at
Private Not-For-Profit Four-Year Institutions

Dr. Michael Vetter (Chair)

Associate Professor, Annsley Frazier Thornton School of Education, Bellarmine University

Dr. Grant Smith

Associate Professor, Annsley Frazier Thornton School of Education, Bellarmine University

Dr. Aaron Hughey

Professor, College of Education & Behavioral Sciences, Western Kentucky University

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Abstract

There has been substantial research conducted around facilitating student success at institutions of higher education and exploring the student experience of undergraduate students, specifically, those students who take part in the residential communities which have become synonymous with the college experience. Through these studies, higher education administrators have learned the significant role residential communities play in a student's success and persistence and have used these findings to inform master plans for institution's capital improvements, programmatic initiatives for residential communities and more. Although this research is helpful for informing the decisions of higher education administrators as they create plans for student success at their institution, it is important to note this literature and the prevailing student development theories and academic research focuses primarily on residential students at higher education institutions or utilized samples which neglected to differentiate between students who commute to campus and those who live on campus throughout the academic year. The purpose of this study is to identify if the prevailing theories of student development still reign true for students who commute to campus and what are the factors which contribute to the sense of belonging for students who commute to campus. Data collect in this study suggests a correlation does exist between a student's sense of belonging score and student success, as defined by grade point average. Additionally, the data suggest the sense of belonging for a student who commutes to campus is more influenced by the number of campus activities the student attends each month and the amount of time the student spends on campus each week outside of their classes.

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Chapter One: Introduction

Introduction

Institutions of higher education have historically been lauded for the significant role they play in the development of society. These “academic ecosystems” have been viewed as the catalysis responsible for facilitating the cognitive and social development of young adults throughout their collegiate tenure as students are exposed to a plethora of varying beliefs and values while provided with the independence to begin their own journey of self-authorship. The collegiate experience is also synonymous with an opportunity for individuals to explore a vast variety of co-curricular experiences and the creation of life-long memories which range from additional opportunities for academic enrichment through research, experiential learning internships, and mentoring with faculty members, to engagement with the campus community through student organizations, intramurals, and campus activities. No matter how unique a student’s interest may be, there is usually a way in which they can find a connection to the campus community.

Research within the field of higher education has indicated the individual success of a student is influenced beyond their scholastic endeavors in the classroom setting. Studies conducted by seminal researchers, Alexander Astin and Vincent Tinto, have shown correlations exists between student engagement, student success and student persistence (Astin, 1984; Tinto, 1993). Astin (1984) postulated a given student’s educational effectiveness was related to the student’s involvement within the campus community and the development of a student was directly proportional with the quality and quantity of a student’s involvement. Similarly, Tinto (1993) postulated for a student to persist toward graduation, they must have both formal and informal integrations into academic and social systems – this is to say students should be

engaging with the campus community –i.e. classmates, faculty and staff –both in the classroom and through co-curricular activities which provide opportunities for campus involvement. These seminal findings for student success have become the cornerstones for continued research in how to facilitate student success and gave way to studying the role a student’s belonging played in their ultimate success and persistence at the institution.

Aside from the feeling of acceptance into an environment or group which accompanies one’s sense of belonging, there are many additional benefits associated with belonging and the importance of attaining this feeling. The seminal research for sense of belonging was published in the early 1990s and focused on young adolescent youth in the K-12 classroom setting – specifically looking at the effects a positive relationship had on classroom achievement and motivation. Findings of this study suggested the support provided by a faculty member and the perceived level of acceptance by classmates were the highest predictor variables for student success in the classroom (Goodenow, 1993). This study has been replicated and expanded upon on numerous occasions to explore the ways in which an individual’s sense of belonging is affected by additional variables and what effects sense of belonging has on a post-secondary student’s outcomes: matriculation, student success, persistence, etc. Persistence and the eventual completion of a degree are important components of student success which are affected by a student’s sense of belonging; however, a student’s persistence at a given institution is inconsequential if a student is not successful in the classroom during their academic journey. Researchers have determined the success of a student’s academic endeavors are directly influenced by their sense of belonging in the in the classroom and campus community (Abdollahi & Noltemeyer, 2018), but this research ignores the existence of the commuter student population within the general undergraduate population. Research on the factors which affect the sense of

belonging of commuter students will benefit the field by identifying practices which foster a sense of belonging and will allow higher education administrators the opportunities to make informed decisions about how to create belonging on their campuses for this growing population. It is noteworthy that involvement and one's belonging in a given situation quite frequently appear synonymous within the literature yet are two distinct entities. Throughout chapter 2, one will have an understanding of how involvement and belonging are disparate, but related.

To further foster opportunities for success, many institutions of higher education began to create small intimate communities to foster student connection both in and outside the classroom. These communities have been shown to assist in the environmental transition of underrepresented students and aid in the establishment of an individual's sense of belonging (Hoffman, Richmond, Morrow, & Salomone, 2002). The addition of learning communities alone to an institution's campus is not enough to cultivate an environment in which all students feel as if they belong. Additional research has indicated a crucial factor for determining sense of belonging is whether an individual feels accepted and supported by their peers and faculty. A study found sense of belonging could be achieved when a student feels comfortable in their classroom and on campus as a result of perceived support from classmates and perceived understanding from faculty members (Tovar & Simon, 2010). These perceived levels of support from classmates and faculty members correlated with a student's intention to persist. Students who felt supported and accepted by their peers felt they belonged to the community and as a result said students were more likely to state intentions to remain part of their established community (Morrow & Ackermann, 2012); although the duration of this study did not permit a final measurement of persistence rates for study participants, the findings are in alignment with the postulations of Vincent Tinto's Theory of Institutional Departure (1993). A 2013 study

expounded upon these findings and determined the successful establishment of a sense of belonging requires more than a perceived level of faculty support and understanding. The successful establishment of a sense of belonging was achieved when a faculty member was viewed as being responsive to a student's needs, empathetic to the student's struggle and understanding of the student's situation (O'Keefe, 2013). With this understanding of how the supportive relationship between a faculty member and a student resulted in success manifested as higher grade point averages, one could explore a potential expansion of this premise beyond faculty members to include any authority figure in higher education who has shown an interest in promoting the success of the student. O'Keefe (2013) suggested beyond the presence of a mentor, institutions of higher education needed to cultivate environments which were perceived as welcoming, engaging and comfortable if a sense of belonging was to be established by students in the campus community.

Statement of Problem & Research Questions

Each fall students across the nation return to their respective institutions for the fall semester – a ritual that has become synonymous with moving away from their families and into residence halls within their campus communities. One would be hard pressed to explore the various mediums of pop-culture – movies, tv shows, books, songs, etc. – about a college experience and not be exposed to this imagery. Yet, this all too well-known scene of a student leaving their family behind and moving into a residence hall is not representative of all students enrolled in post-secondary institutions. According to the National Post-Secondary Student Aid Study (2016), approximately 60% of undergraduate students enrolled in private four-year not-for-profit institutions and 75% of undergraduate students enrolled in public four-year institutions do not reside on campus, yet we know very little about their college experience.

There has been substantial research conducted around facilitating student success at institutions of higher education and exploring the student experience of undergraduate students, specifically, those students who take part in the residential communities which have become synonymous with the college experience. Through these studies, higher education administrators have learned the significant role residential communities play in a student's success and persistence (Alfano & Eduljee, 2013; Brooks, 2010; Hoffman, Morrow, & Salomone 2002; Simpson & Burnett, 2017) and have used these findings to inform master plans for institution's capital improvements, programmatic initiatives for residential communities and more. Although this research is helpful for informing the decisions of higher education administrators as they create plans for student success at their institution, it is important to note this literature and the prevailing student development theories and academic research focuses primarily on residential students at higher education institutions or utilized samples which neglected to differentiate between students who commute to campus and those who live on campus throughout the academic year. A post-hoc analysis of data from the National Survey of Student Engagement (NSSE) indicates the number of students at higher education institutions who commute to campus has increased significantly and is expected to continue to increase over time (Kuh, Gonyea, & Palmer 2001). This trend of students electing to commute to campus rather than living in institution owned residential facilities is likely to continue in light of the COVID-19 pandemic (LeClair, 2021). Although data indicates a growth of this student population, there is little research to indicate whether the data which we use to inform our student success initiatives and student support models is even effective for this ever-evolving population of students who commute to campus. And many institutions have yet to adapt their campus and student support services to be more accommodating of the growing commuter student population and instead

view the student body, in its entirety, as residential students (Newbold, 2015). As this population continues to grow, it would behoove the field of higher education to more fully understand this population and what practices ensure their ultimate success.

Research Questions

- RQ1. What is the relationship between sense of belonging and student success for students who commute to campus?
- RQ2. Based off items in the General Belonginess Scale, what factors contribute to the sense of belonging of students who commute to campus?

Theoretical Framework

To explore the sense of belonging of students who commute to campus, this study utilized one of the first instances in which the psychological benefits of belonging was studied as the basis for the theoretical framework – that theoretical framework being Maslow’s publication of *Motivation and Personality* (1954). In it Maslow postulated a hierarchy of needs one must satisfy in order to reach their full potential – a concept he identifies as “self-actualization”. The model postulated an individual’s physiological needs – food, water and shelter – must be satisfied for an individual prior to one being able to focus on their emotional and cognitive development. Once the basic needs of an individual have been met, they are able to experience growth, but development is hindered by an individual’s desire to experience acceptance, belonging, friendship and accomplishment, the psychological needs of an individual. Only once an individual has attained a perception of belonging, as well as the gratification of their basic needs, is that individual able to reach their full potential (Maslow, 1954). Strayhorn (2019)

expounded upon this foundation and postulated that belonging is context-dependent and establishing belonging in a particular context has the greatest influence on outcomes associated with that area (p. 34). That is to say, if a student struggles to find belonging within a classroom, academic unit, student organization, etc. they will struggle to achieve their desired outcomes in that particular space. A more in-depth explanation of Strayhorn's *College Students' Sense of Belonging* (2019) takes place in chapter 2.

Summary of Methodology

A quantitative approach was utilized to determine what, if any, relationship exist between a student's belonging and their success, as defined by their grade point average, and to identify what institutional factors have a positive influence on a student's sense of belonging. A quantitative instrument adapted from Strayhorn's (2011) Sense of Belonging in College Scale and the General Belonging Scale (Malone, Pillow & Osman, 2011) was utilized for measuring the perceived belonging of study participants at three private, not-for-profit, four year institutions in the eastern United States. The instrument utilized a Likert scale for twelve items to determine a general belongingness score for each participant; additional questions explored the student experience of the participants by inquiring about campus involvement, extra-curricular commitments and time spent on campus outside of the curricular setting. Private institutions are synonymous with smaller, intimate settings which are optimal for one to establish a sense of belonging. The utilization of a regression analysis was the chosen method for confirming the existence of a relationship between belonging and student success. Additional statistical analysis, such as an analysis of variance and correlations, will be employed to identify which factors, if any, have a positive effect on the establishment of a participant's belonging, as well as the overall influence the factors have on the participant's general belongingness score. The study

was replicated at four separate institutions to increase generalizability and to confirm the findings are not unique to the commuter population at a specific institution.

Significance

As indicated previously, the undergraduate student is constantly evolving from the traditional student who resides on campus to one who commutes to campus for academic coursework and lives off campus with additional responsibilities. The perception of an institution being welcoming and accommodating to commuter students has effects that reach beyond positive optics for the institution as illustrated previously through the profound impact a sense of belonging has on a student's success and persistence towards degree completion. Data collected from the National Post-Secondary Student Aid Study has indicated students are capable of achieving a higher level of success in the classroom when residing in an on-campus housing option or when residing at home under the supervision of a parent (Lopez Turley & Wodtke, 2010; Simpson & Burnett, 2017). Additional research suggests student's residing on campus have a higher propensity for engagement with the campus community than a student residing at home or off-campus with friends (Alfano & Eduljee, 2013), suggesting individuals residing in on campus housing have a higher likelihood of experiencing success and persisting at an institution when compared to a student who commutes to campus. Interpretation of this data would suggest an individual's place of residence – and ultimately their success in college – is a result of the dichotomy of the haves and have nots. As institutions strive to advocate for and champion the scholastic endeavors of this growing population it will be critical for institutions to know how to facilitate opportunities for commuter students to establish their sense of belonging and be provided with the same opportunities for success as residential students.

Limitations

All data utilized in the study is self-reported and assumes study participants are providing honest and accurate answers to the survey questions regarding their involvement within the campus community and perceived level of belonging. It should be noted that data collection took place in the 2021-2022 academic year which was the first time many institutions return to a more traditional student experience following the COVID-19 global pandemic and had small periods of time in which institutions re-introduced mitigation efforts to control the spread of the virus on their campus. The vast changes mandated to mitigate the spread of COVID-19 encouraged solo and isolating behaviors which quite possibly will leave indelible marks on the student's collegiate tenure and thus might influence the survey responses.

Definition of Terms

- Belonging - student's sense of being accepted, valued, included, and encouraged by others (Goodenow, 1993, p. 25).
- Commuter Student – college student who lives off campus, not in university-owned housing, or resides off campus with family members or relatives (Jacoby, 1989)
- Engagement – the initiatives employed by institutions to get students to participate in activities that lead to student success (Kezar & Kinzie, 2006).
- Involvement – the amount of physical and psychological energy that college students devote to the college experience whether curricular or co-curricular in nature (Astin, 1999).
- Student Success – academic achievement as determined by a student's grade point average

Chapter 2: Review of the Literature

Introduction

The profile of a traditional undergraduate student, the theories explaining the psychological phenomenon of belonging and the theories postulating student success and persistence have evolved substantially over the past few decades. This chapter will provide an understanding of the current demographics that one could expect to find on the campus of a private not-for-profit post-secondary institution, as well as a foundational understanding of the relevant theories which inform student success initiatives and the relevant research studies which corroborate the theories.

The review of literature presented in this chapter will start with an exploration of the commuter student population including a synopsis of the population's historical and forecasted growth, and an overview of the profile and common experiences and non-academic commitments of a commuter student. The chapter will then review the literature of the theories utilized in this study including Astin's Theory of Student Involvement, Tinto's Theory of Student Departure, Maslow's Hierarchy of Needs and Strayhorn's Theory of College Student Belonging. The review of literature will conclude by exploring belonging: how it is measured and the associated benefits of belonging.

Commuter Population

All too often students in post-secondary institutions are viewed by the general public, faculty, staff, students – and even Hollywood – through the stereotypical lens that all students reside on campus. Yet that antiquated notion of a student's place of residence could not be further from the truth. When post-secondary institutions began to experience significant enrollment increases in the 1960s through the late 1900s post-secondary institutions had limited facilities for housing the ever-growing student population and many students elected to reside at

home rather than compete for the scarce housing on campus. This period 20-year period of growth, 1960 – 1980, marked the point in which commuting to campus became a cultural norm for campus communities (Kim & Rury, 2011). As post-secondary institutions evolved their campus facilities and renovated residential communities in response to the demand for a post-secondary education, many students still chose to commute to campus. In fact, commuter students represent the majority of today's undergraduate population of students at post-secondary institutions with approximately 16 million commuter students being found at institutions across the nation (NCES, 2014; Horn & Berkold, 1998).

The classification of residential and commuter student is one way to analyze a student population; however, this classification is complicated by the ever-increasing diversity found within the commuter population and the prevalence of commuter students at all institution types – public, private, four year, and two year (Jacoby, 2015). Take for instance the variation which exist within the commuter population: *dependent commuter* – those who reside off-campus with a family member or relative and continue to receive support and guidance from them, compared to, *independent commuter* – those who reside off-campus with friends and are self-reliant in their everyday life (Dugan et al., 2008; Martin & Kilgo, 2015). Although these variations within the commuter population exist, it is important to note all commuter students lack the institutional support given to residential students – e.g. immersive communities, invitations to campus activities from residential assistants, etc. There are many reasons for why a student might elect to reside on campus or commute to campus. A 2014 study published in the *College Student Journal* determined socioeconomic status, parental education levels, and the disbursement of financial aid packages were all significant variables in predicting a student's place of residence (Gianoutsos & Rosser, 2014). Interpretation of this data would suggest an individual's place of

residence is a result of the dichotomy of the haves and have nots, with those in the *haves* category being fortunate to reside on campus and those in the *have not* category commuting to campus for a more cost effective option.

Commuter Student Profile

Studies have found a student commuting to campus is more likely to have additional responsibilities when compared to their peers residing on campus (Burlison, 2015; Pascarella & Terenzini, 2005; Hall & Valine, 1977; Hybertson Hulme, Smith & Holton, 1992). A quantitative study by Alfano & Eduljee (2013) sought to explore the commitments of commuter students in the northeastern United States. Through their study of 108 undergraduate student who commute to campus, they identified a commuter student was more likely to have commitments within the community such as work and family than their peers who resided on campus. Alfano & Eduljee (2013) acknowledged that many of the residential students in their study held off-campus employment positions, but the hours of employment were greater for commuter students and the reason for employment differed with nearly 70% of commuter students indicating they held employment positions to pay bills or tuition while the majority of residential students indicated their employment was to have “spending money”. Studies conducted within both public and private post-secondary institutions indicated commuter students frequently worked at off-campus employment 20+ hours each week while residential students worked at off-campus employment approximately nine hours each week (Alfano & Eduljee, 2013; Furr & Ellings, 2000; Newbold, et al, 2011). In addition to employment commitments, commuter students frequently have responsibilities with their families such as providing care for siblings or relatives (Burlison, 2015; Lowe & Gayle, 2007). Even when a commuter student has available time to spend on campus or engaging with campus activities, organizations or events, they will likely elect to

spend time with their family instead as a result of feelings of guilt and abandonment of family responsibilities (Lowe & Gayle, 2007).

Theoretical Framework

Astin's Theory of Student Involvement

Astin's Theory of Student Involvement (1984) has served as the seminal research and theoretical framework for championing the importance of the co-curricular experience. Within his theory, Astin (1984) postulates a student's environment while enrolled in a given institution has a significant influence on the psychosocial and cognitive development of a student, with the student's environment being defined as their involvement with the institution. It is important to note that involvement frequently is categorized as membership within an institutional sponsored club or organization, but rather involvement refers to the student's investment of time and energy into any aspect of the institution's co-curricular experience – i.e. student activities, intercollegiate athletics, faculty research, peer mentoring, internships, studying, research, etc. (Kuh & Pike, 2005). In the theory, Astin (1984) makes five assumptions about involvement.

1. Involvement is the investment of physical and psychological energy into a given object
2. Involvement is continuous and investment varies by time and object
3. Involvement has both quantitative and qualitative features
4. Student learning and development in a given program is directly proportional the quality and quantity of student involvement in that program
5. Academic performance is correlated with student involvement

Astin's Theory of Student Involvement will serve as a guiding framework in understanding the importance of involvement within a student's post-secondary experience.

Tinto’s Theory of Student Departure

Tinto’s Theory of Student Departure (1993) serves as the seminal work for student persistence in post-secondary institutions. In it, Tinto postulates the importance of formal and informal integrations into academic and social system; meaning, students should be engaging with the campus community –i.e. classmates, faculty and staff –both in the classroom and through co-curricular activities which provide opportunities for campus involvement.

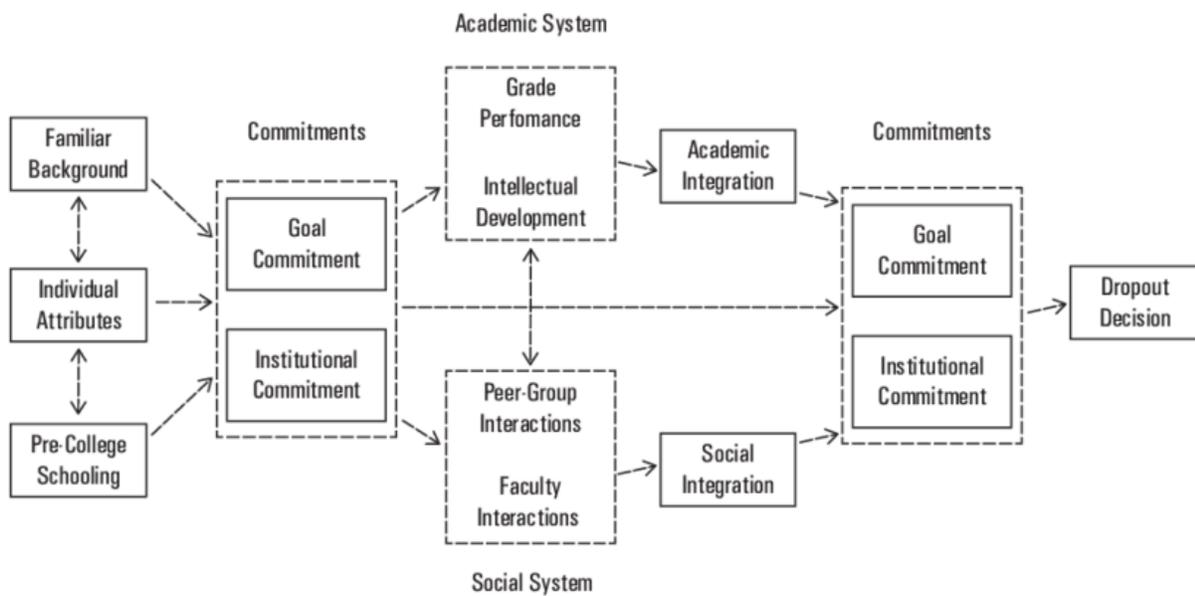


Figure 2.3: Visual Representation of Tinto’s (1993) Theory of Student Departure

Although widely accepted as the foundational piece for understanding the motivation behind a student’s decision to persist at a given institution, the theory is frequently critiqued for ignoring the influence of external factors such as family, friends and commitments outside of the student’s academic endeavors (Cabrera, Nora, Castaneda, 1993). Similarly, a study by Milem & Berger (1997) found social integration solely, not both academic and social integration as postulated by Tinto (1993), to be statistically significant in predicting one’s persistence.

The importance of social integration in predicting the persistence of a student has been further explored. Berger & Milem (1999) suggested early campus involvement – i.e. the fall

semester of the first year – had statistically significant effects on the social and academic integration of a student and ultimately their institutional persistence. One could reasonably assume the curricular and co-curricular experience of a student could potentially vary depending upon the institution type; however, research has determined the categorization of public institution, private institution, two-year and four-year had no impact on the importance of academic and social integration in a student’s persistence (Strauss & Volkwein, 2004).

Maslow’s Hierarchy of Needs

The seminal document for the studying of the psychological phenomenon of belonging was Maslow’s publication of *Motivation and Personality* (1954). In this work Maslow postulates a hierarchy of needs one must first satisfy in order to reach their full potential – a concept he identifies as “self-actualization”. A visual representation of the theory is included in figure 2.1 with the most basic needs residing at the base of the pyramid and self-actualization serving as the pinnacle.

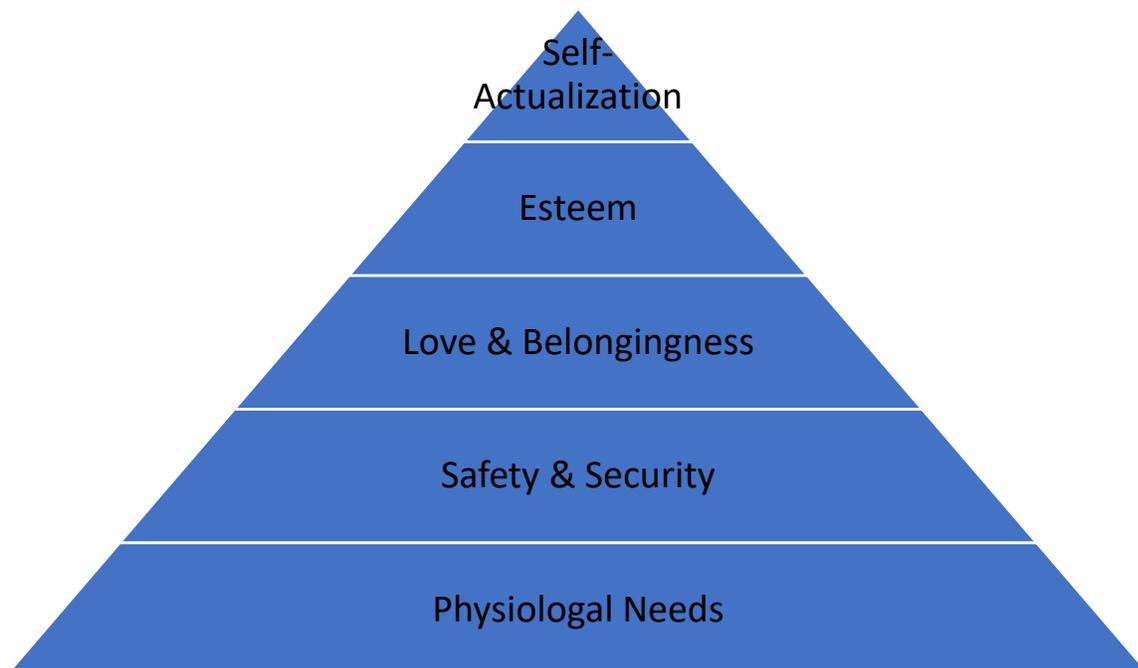


Figure 2.1 Maslow's Hierarchy of Needs (1954)

The model postulates an individual's physiological needs – food, water and shelter – must be satisfied for an individual prior to one being able to focus on their emotional and cognitive development. Once the basic needs of an individual have been met, they are able to experience growth, but development is hindered by an individual's desire to experience acceptance, belonging, friendship and accomplishment, the psychological needs of an individual. Only once an individual has attained a perception of belonging, as well as the gratification of their basic needs, is that individual able to reach their full potential (Maslow, 1954). Critics of Maslow's Hierarchy of Needs argue that the needs of an individual are not hierarchal or linear in nature, but rather the needs of an individual are interactive and dynamic in nature and individuals are motivated by the need which is most pressing at that time (Rutledge, 2011). Additionally, Rutledge (2011) describes how none of an individual's basic needs, such as food, shelter, warmth – the base of the hierarchal pyramid – or an individual's safety and protection needs – the second level of the model – are possible without the assistance or collaboration of others; however, Maslow's Hierarchy of Needs (1954) does not postulate the importance of social connection and belonging until the third level of the model. Although problematic for the conceptual understanding of an individual's needs, the critiques of Maslow's Hierarchy of Needs compliment the assertion that an individual's sense of belonging is pivotal in the success of an individual in their endeavors.

Strayhorn's College Student's Sense of Belonging

The theoretical foundation of belonging and acquisition of basic needs has been further explored by scholars in an attempt to explain the relationship between belonging and attainment. Building off of Maslow's Hierarchy of Needs (1954), Motivation Theory of Self-Determination,

postulates that individuals spend their time and energy seeking to satisfy their desires; if needs such as food, water, or belonging are not met, the individual will devote all of their attention to satisfy those needs first, rather than devoting resources to their intended project (Deci & Ryan, 2000; Strayhorn, 2019). With an educational setting, one could see Motivation Theory in action when a student who has not yet made connections to the campus community, devoting a substantial amount of their time and energy into being accepted within the community rather than focusing on their scholastic endeavors. Using the premise of motivation theory, Strayhorn (2019) postulated a theory of college student sense of belonging which states the behaviors and perceptions of a college student are intentional efforts for the student to create belonging within a specific setting. Further, students who are successful in this quest for belonging are rewarded with achievements –both academically and co-curricular in nature –persistence, growth, and happiness, while those students who are unsuccessful have a propensity to experience frustration, unhappiness and mental health challenges (Strayhorn, 2019).

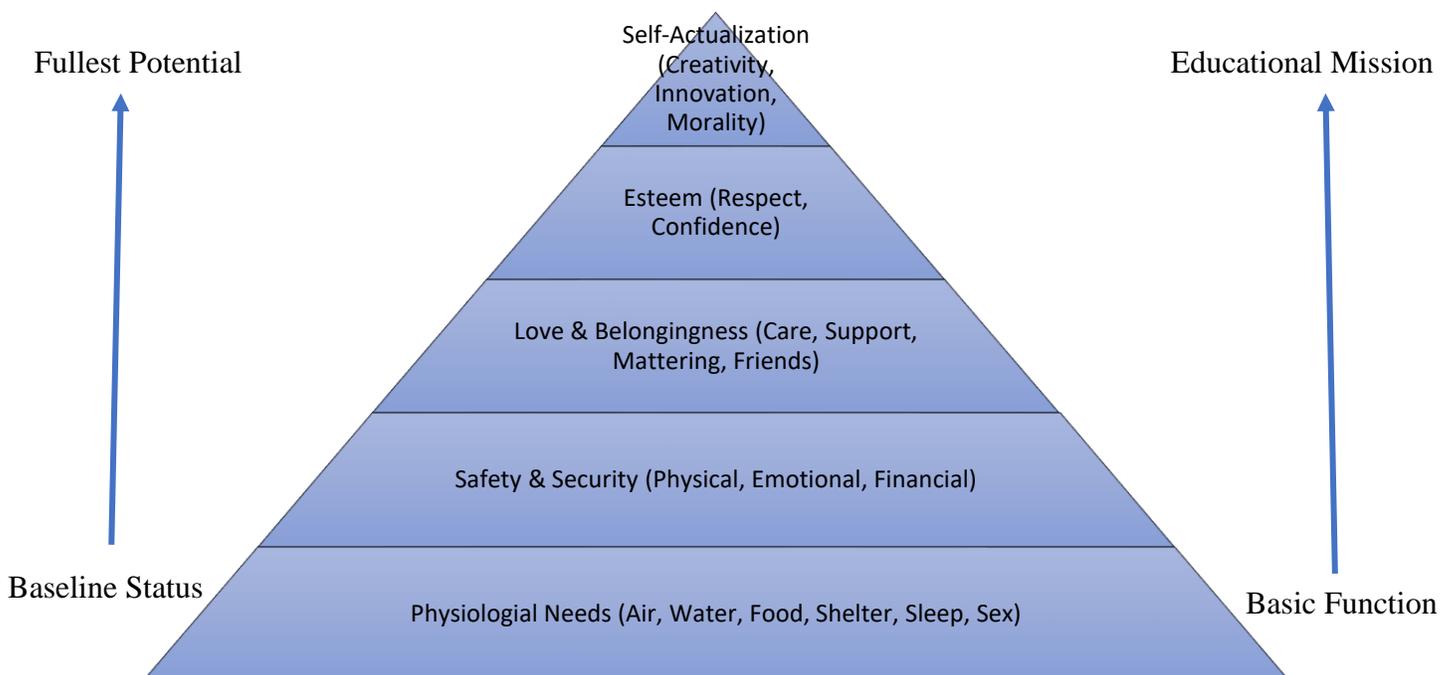


Figure 2.2: Revised model of college students' sense of belonging (Strayhorn, 2019).

Strayhorn's theory is helpful in understanding the reasoning behind a student's decision to join a particular organization or team, or why they might select a specific area of study or courses. However, it is important to note a central tenet of the theory is the recognition of the multifaceted lives of a student are influenced by many factors such as their identity, beliefs, and values, with each of those factors having its own space or context of belonging which influences the others. This interconnectivity results in positive outcomes when a student is able to find belonging in all of their contexts but can have detrimental results when a student struggles to find belonging in one of their disparate contexts. For example, a student may appear to be well connected to the campus community through their involvement in the co-curricular realm and within their academic program, but has not found belonging through their identity, one could reasonably expect the student's lack of belonging associated with their identity to have a negative effect on their ability to progress through the model toward self-actualization and ultimately their success and persistence.

COVID-19 Pandemic & Belonging

The COVID-19 virus, a highly contagious respiratory infection, drastically altered life in the spring of 2020. As a result of the ease in which the virus could spread from one individual to another, many common practices and activities were forced to be reimagined to take place in a virtual or physically distanced environment. These effects of these mitigation efforts were especially noticeable in the congregate settings of a college campus where classrooms defaulted to a virtual environment, institution dining halls converted to carry out facilities and the co-

curricular activities synonymous with a college experience became non-existent for many students (American College Health Association, 2020).

The annual wellness assessment (2021) conducted by The Ohio State University's Center for the Study of Student Life provides some insight on the effects COVID-19 mitigation efforts had on undergraduate student wellness and sense of belonging. Data in this study was collected at two separate instances, October 2020, which is identified as the pandemic data, and January 2020, which is identified as pre-pandemic data. To determine the sense of belonging score, students utilized a four-point Likert scale to state their level agreement with various questions regarding belonging on campus. These questions were used to identify an overall belonging score for the student out of a possible four points, with four being indicative of a strong sense of belonging. A comparison of the average sense of belonging scores of the pre-pandemic and pandemic data sets indicates a decrease in the overall sense of belonging of the undergraduate student population. The pre-pandemic data shows an average belonging score of 3.02 which decreased to 2.75 when remeasured during the pandemic. Similarly, a longitudinal study in Ireland explored the sense of belonging of computer science students prior to the COVID-19 pandemic and during the COVID-19 pandemic and found student sense of belonging scores during the pandemic had decreased compared to the sense of belonging scores prior to the COVID19 pandemic (Mooney & Becker, 2021). Both of these studies draw attention to an unintended outcome of the COVID-19 mitigation efforts and serve as a reminder that overall belonging scores during and after the COVID-19 pandemic may be lower than one would expect.

Involvement, Belonging & Commuter Students

As shared previously in this review of the literature, a typical commuter student has different commitment and focuses when compared to traditional aged students who reside on

campus. The additional commitments outside of the commuter student's academic pursuits have given rise to perception of commuter students being less-involved their residential peers. Studies exploring the co-curricular involvement of commuter students have confirmed this perception (Alfano & Eduljee, 2013; Kuh, et al., 2001); however, this perception is not true when exploring commuter student involvement within the campus community at large. In 2001, Kuh, et. al, conducted one of the most comprehensive explorations of the commuter experience when they conducted a post-hoc analysis on 105,000 responses from 470 different four-year post-secondary institutions across the nation as part of the National Survey of Student Engagement. As a result of their analysis, Kuh, et. al, (2001), found a student's distance from campus had a direct effect on the student's engagement with the campus community. Based on the findings of Kuh, et. al, (2001) students who commute to campus but are close enough to walk to campus are more likely to be engaged within the campus community through student organizations, campus activities, academic research, peer connections, etc. than those who commuted to campus via a car due to their distance from campus. Although commuter students are less likely to participate in campus events, intramurals and student organizations than their residential peers, they are inclined to be involved in the campus community through their academics such as through participation in major specific study groups, taking part in institutional offered tutoring or serving as a peer tutor, joining a faculty member within their department for research, etc. (Alfano & Eduljee, 2013; Kuh et al, 2001; Jacoby & Garland, 2004). In addition to the external commitments of a commuter student, one must also consider the commute time as a limiting factor for a commuter students campus involvement and overall time spent on campus. A longitudinal study of a small school in southern Indiana collected travel times for commuter students in a 100-level sociology course over seven semesters and determined the average commuter had a 30-minute one-way

commute to campus (Howard, 2005); a similar study was conducted by Alfano & Eduljee (2013) and determined the average commuter student had a 28.6-minute one-way commute to campus. The considerable investment of time to commute to campus has resulted in many commuter students being strategic in arranging academic schedules and selecting opportunities for involvement to maximize their time on campus (Bozick, 2007). The lack of time on campus and involvement with traditional student engagement initiatives creates a barrier for commuter students to identify with and relate to their peers and the institution at large (Gefen & Fish, 2013; Jacoby, 2000).

One of the most impactful studies to date for understanding the commuter student experience was a qualitative study of first year students commuting to campus at an Australian institution. Through the qualitative interviews Krause (2007) learned the pivotal influence social interactions with peers had on a student's motivation and highlighted the importance of small social gatherings for establishing social connections versus large group settings. The findings of Krause (2007) have influenced curricular modalities with the inclusion of discussion board and group work elements, as well as cohort bonding in the co-curricular setting.

It is important to note body of research related to commuter students and their involvement within the campus community is rather shallow. This section of the literature review explores the available works in the scholastic body and highlights the gap which exists since many of the studies to explore commuter student involvement were conducted in the early 2000s or prior. Burlison (2015) acknowledges the findings presented from these studies are important for facilitating student success but more research is needed determine the true differences which exist between involvement and engagement for commuter students compared to residential students. This dissertation will begin to address some of the deficits highlighted in the literature.

Measuring Belonging

One of the first instruments seeking to quantify the levels of belonging for an individual began in the field of psychiatric nursing. Hagerty & Patusky (1995) created a 49 item Sense of Belonging Instrument (SOBI) used for measuring general psychometric properties. However, a factor analysis of the results indicated two distinct factors, not just general belongingness, was being measured through the instrument – psychological experiences and antecedents to belonging. Validity for this instrument was measured by administering the instrument to three populations – 379 community college students who had received no psychiatric treatment in the past year, 31 individuals receiving treatment for clinical diagnosed major depression, and 37 Roman Catholic nuns. An Analysis of Variance (ANOVA) was conducted on the data and confirmed a statistical difference between the mean results of the three populations as expected based on criteria for the populations. This instrument is widely used to assess the social and psychological functioning of an individual (Hagerty, et. al, 1996), but the scope of the instruments utilization is limited to psychiatric fields. Using Hagerty & Patusky's (1995) instrument as a guide, Malone, et. al. (2012) sought out to create a general scale for measuring an individual's belonging by creating a list of 30 items which when answered could provide insight into an individual's belonging. The 30 items – 14 positively phrased and 16 negatively phrased – were reduced to 12 items based on results from an exploratory factor analysis and a secondary factor analysis of the 12 items accounted for 68.3% of the variance. To test validity of the instruments, participants were administered the 12 item General Belongingness Scale (GBS) and additional validated scales of happiness and belonging. Participant results for the GBS were

compared to participant results for the validated scales through a confirmatory analysis and the GBS was shown to be reliable.

One of the seminal works for understanding the impact of sense of belonging within an educational setting was Goodenow's (1993) study of junior high students. Goodenow administered a 28 item Class Belonging and Support Scale instrument to 353 students in junior high to measure a student's perception on their acceptance within a group, alienation and acceptance at school. A multiple regression analysis found perceived teacher support was the highest predictor variable for student success followed by perceived acceptance by classmates which alone explained 40% of the variance (Goodenow, 1993). Although this study was specific to understanding the role of belonging within a K-12 setting, the study was later replicated within a higher education setting. Freeman, Anderman, & Jensen (2007) administered the 28 item Class Belonging and Support Scale instrument used by Goodenow (1993) to 238 first year students at a large public institution. A principal component analysis of the data indicated themes of (1) general sense of belonging, (2) faculty support, and (3) peer acceptance were found in all of the survey responses and all three had positive correlations to persistence (Freeman, Anderman, & Jensen, 2007). One of the first instances of belonging being measured on a specific population was with Jacobs and Archie (2008) as they sought to explore the sense of belonging of first year students. Jacobs and Archie (2008) utilized an adapted version of the Sense of Community Index to analyze what effect each aspect of community had on 305 first year students' intentions to persist. Similar to the studies of Freeman, Anders, & Jensen (2007), Jacobs and Archie (2008) found a positive correlation between a student's sense of belonging and a student's decision to persist with a given population. More importantly, this study identified membership within communal settings, such as being a member of a fraternity or sorority life organization, residing

in a residential community, or being a member of an affinity organization based on one's identity were instrumental in creating a sense of belonging (Jacobs & Archie, 2008); these findings of the benefit of community were a confirmation of the findings by Hoffman, Richmond, Morrow, & Salomone, (2002). Similarly, a quantitative study by Elkins, Forrester, and Noel-Elkins (2011), found students who participated in recreational sports, such as intramurals or club sports, reported a higher sense of belonging than their peers who did not participate in organized sports. The findings of Jacobs and Archie (2008) and Hoffman, et. al. (2002) extoll the benefits of the residential student experience and supports the importance of this dissertation study to explore whether students who commute to campus are at a disadvantage for establishing a sense of belonging and the benefits associated with the psychological phenomenon.

Belonging & Student Success

For many, the concept of belonging equates to involvement, but some would differ with that assumption. Research suggest connections within the curricular and co-curricular setting is integral to student success, but that connection piece, or the establishment of one's belonging, is created through involvement, it is not inherently involvement itself. This literature review thus far has identified the theoretical importance of establishing a sense of belonging in one's quest toward reaching their full potential. Beyond the obvious benefit of feeling accepted within a community, there are additional benefits associated with a student creating a sense of belonging within a post-secondary institution such as success in the classroom and persistence (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008; Tovar & Simon, 2010; Abdollahi & Noltemeyer, 2018; Morrow & Ackermann, 2012). Astin (1993) postulated involvement of any kind on campus –curricular or co-curricular –would result in a positive outcome for the student; that is to say there is a direct

correlation between the quality of student involvement –whether time study or time devoted toward co-curricular experiences --and the outcome experienced. Kuh, et. al, (2008) conducted a post-hoc analysis of grade point averages (GPAs) and data from the National Survey of Student Engagement (NSSE) data for eighteen institutions to further explore Astin’s postulation. The NSSE is a bi-annual survey administered to faculty and staff at more than 1,600 four-year post-secondary institutions across the nation. Questions on the NSSE provide a snapshot of the ways in which students are involved on their campuses and how involvement differs by region, institution type and institution size. In this study, Kuh, et. al (2008) defined involvement as either (1) time spent studying, (2) time spent with co-curricular engagement initiatives, and (3) time spent with remaining NSSE items (engagement with campus community through fine arts, home athletic competitions, learning communities, etc.). The resulting model from the comparison of grade point averages to NSSE items indicated time spent with co-curricular engagement had the largest impact on a student’s GPA and suggested a direct correlation between the involvement of a student and their resulting academic performance (Kuh, et. al, 2008).

Involvement with a post-secondary institution’s co-curricular engagement initiatives is the not only way to establish an impactful sense of belonging. Gerdes & Mallinckrodt (1994) conducted a longitudinal study to determine whether belonging established through peer acceptance or faculty acceptance is most impactful for students. In the study, students at the six week mark of their first semester were asked to complete a 67 item assessment which measured institutional attachment, academic adjustment, social adjustment and emotional adjustment. There results indicated a student’s academic standing served as a delineation for which route of social integration was most successful for them. Students in poor academic standing (5 or more D or F grades on a cumulative transcript) were more likely to persist at the institution and have

an increased efficacy if they had social integration through the campus community and resources opposed to connection to the institution through faculty members. Individuals in good academic standing were more likely to persist if they had social integration through academic courses and a positive relationship with a faculty member opposed to connection to the institution through co-curricular engagement. However, it is not enough to have a positive relationship with a faculty member. Rather a student should experience empathy, responsiveness, and understanding of their situation from the faculty member in order for a feeling of belonging and mattering to truly be created (O'Keefe, 2013; Johnson, 1997). These key characteristics were identified through a qualitative study of student retention for students with a high risk for not being retained: underrepresented identity, academically underprepared, students with a disability and students from a low socioeconomic status. When characteristics of empathy, responsiveness and understanding were perceived by a student, they expressed a feeling of belonging at the institution and had a higher rate of persistence than their peers who did not perceive those characteristics at the institution.

A strong relationship through the curricular setting is impactful for ensuring student success, but the ability to create a sense of belonging does not rest solely on the ability of one to create a social connection with a faculty member. Perceived support from peers and acceptance in the classroom are also integral to establishing a sense of belonging and have shown to correlate with student success and strong academic performances (Tovar & Simon, 2010; Abdollahi & Noltemeyer, 2018; Brooman & Darwent, 2014; Morrow & Ackermann, 2012).

Tovar & Simon (2010) highlighted the importance of sense of belonging through their study seeking to confirm reliability of the Sense of Belonging Scales created by Hoffman, Richmond, Morrow, & Salomone (2002). Tovar & Simon (2010) used a confirmatory factor

analysis and exploratory factor analysis to validate this instrument. Students were provided with a 26-item survey, featuring 23 positive phrased items and 3 negative phrased items, to assess sense of belonging with a higher score on the instrument being associated with a higher sense of belonging. The survey invitation yield 916 responses which were divided into two randomly assigned separate sub-groups consisting of 463 students in group 1 and 453 students in group 2. An exploratory factor analysis was conducted on the data for group 1 and a confirmatory factor analysis was conducted on the data for group 2. Results from the exploratory factor analysis indicated three factors – perceived faculty understanding, perceived peer support, and perceived classroom comfort – were the main elements which contributed to an individual’s sense of belonging and could be measured through 20 items on the survey. These three elements contributed to the hypothesized model for sense of belonging which would be used in the confirmatory analysis of the group 2 data. Results of the evaluation of the new three factor and 20 item survey data indicated a large numbers of residuals because of cross-loading of items. The four items associated with cross-loading were removed from the data set and a second confirmatory analysis was conducted on the three factor and 16 item respecified model for sense of belonging. Again, the model indicated a large error covariance between two items which both form part of the peer relationship factor, but the created model of sense of belonging was determined confirmed to have a good fit. Results from both the confirmatory and exploratory factor analyses indicated perceived support from peers and perceived support from faculty were statistically significant in establishing a sense of belonging and showed no invariance between class level (Tovar & Simon, 2010). This study validates much of the existing research which had been critiqued for not differentiating by class year.

Findings from Tovar and Simon (2010) were further explored by other researchers to determine the relationship between sense of belonging and persistence. Perceived support from peers and faculty, a foundational piece to establishing belonging, was shown by Morrow & Ackermann (2012) to be significant in predicting student persistence. In their study, 960 students were invited to participate in an online survey to explore the factors which contribute to a successful persistence rate. Out of the 960 invited participants, 156 completed the online survey. Similar to Tovar & Simon (2010), Morrow and Ackermann (2012) utilized the 26 item Sense of Belonging Scale created by Hoffman, Richmond, Morrow, & Salomone (2002) and a self-reported question regarding the student's intention to persist along with institutional data regarding the participants persistence for the next academic year. A multiple regression analysis approach was utilized to determine if a relationship existed between sense of belonging and intention to persist. Along with the overall sense of belonging score, sub-scores related to items determining peer support, faculty support, classroom comfort and perceived isolation were also regressed onto the intention to persist to determine if any relationships existed. Through the regression of these items, it was determined the overall sense of belonging score was not significant in predicting the persistence of a student; however, the sub-score for perceived faculty support was determined to be statistically significant in predicting the persistence of a student. The inferred benefits associated with student success and as a vehicle for social mobility beyond the student's career at the post-secondary institution highlight the importance of social integration during their collegiate tenure.

Building upon the existing research for sense of belonging, Brooman & Darwent (2014) sought to explore the role sense of belonging played in a first year student's transition to law school. Using a pre-test post-test approach, the researchers collected 141 survey responses which

measured self-efficacy, autonomous learning and social integration through a sense of belonging. The pre-test instrument was administered on the second day of class with the post-test instrument being administered four weeks later. Paired t-test and ANOVAs indicated a statistically significant relationship existed between sense of belonging and self-efficacy with an increase in self-efficacy levels from the pre-test to the post-test with those students who had a sense of belonging within their law school community. Findings of this study reiterate the importance of a student reaching their full academic potential only when they feel as if they belong in the institution and academic setting.

Similarly, Abdollahi and Noltemeyer (2018) explored the relationship between sense of belongingness and student success in a high school setting. The study administered Goodenow's (1993) 18 item instrument called the Psychological Sense of School Membership to 520 students at eight different high schools throughout Iran. Structural equation modeling was used to analyze the data and estimate structural path coefficients. A positive correlation was found to exist between a student's perceived sense of belonging at the school and the student's success in the classroom as determined by their grade point average. A mediation test was conducted to determine if this positive correlation was valid or if it was a result of a student's academic hardiness – the student's attitude regarding academic success (Benishek & Lopez, 2001). Mediation tests indicated a slight influence from academic hardiness, but the correlation between sense of belonging and student success was still determined to be statistically significant indicating a student's sense of belonging strongly influences the student's success in the classroom.

Rationale for Study

As indicated previously, much of what is known about student development and student success originated from the late 1900s and made no distinction between residential and commuter students. There has been considerable research outlining the associated benefits for belonging, persistence and success in the classroom for those students who reside in an institution's residential community (Jacobs & Archie, 2008), yet very little exist on commuter students. That research which does exist tends to focus on commuting to campus as a disadvantage and rare situation, as opposed to the predominate experience for most students in post-secondary institution. It is also important to note that most available research on commuter students rely on a single institution and utilize small sample sizes which makes generalizability recommendations challenging (Burlison, 2015). The findings of this study would provide an update to the available body of scholarship on commuter students and how they go about creating a sense of belonging while also exploring commuter students at private, not-for-profit institutions opposed to the existing literature which focuses on public institutions.

Research Questions

RQ1. What is the relationship between sense of belonging and student success for students who commute to campus?

RQ2. Based off items in the General Belonginess Scale, what factors contribute to the sense of belonging of students who commute to campus?

Chapter Three: Methodology

This chapter discusses the rationale for exploring the potential relationship which exist between student success and sense of belonging for students who commute to campus and which factors contribute to a student's sense of belonging. Prior to this study, no research was found to indicate relationships which exist between sense of belonging and student success for students who commute to campus, nor information about how students who commute to campus go about establishing a sense of belonging within their campus community. The following sections will describe the sites and participants who were invited to participate in the study, as well as an overview of the instrument used and statistical procedures followed for the data analysis.

Research Procedures

Site Selection

The data for this study was collected at four separate, small, private, not-for-profit, four-year, post-secondary institutions in the eastern United States. Private post-secondary institutions are synonymous with smaller, intimate settings which are optimal for one to establish a sense of belonging and present the most favorable conditions for a research study focused on belonging. The four research sites were selected for their similarity in overall population, percentage of students who commute to campus and identification as "peer institutions" according to site A's Office of Institutional Research & Effectiveness.

- *Site A* – is a private, co-educational, Roman Catholic institution located in an urban setting. The institution has approximately 2,500 undergraduate students with 60% of the undergraduate population commuting to campus.

- *Site B* – is a private, co-educational, Christian institution located in an urban setting. The institution has approximately 1,000 undergraduate students with 42% of the undergraduate population commuting to campus.
- *Site C* – is a private, co-educational, Methodist institution located in an urban setting. The institution has approximately 2,300 undergraduate students with 40% of the undergraduate population commuting to campus.
- *Site D* – is a private, co-educational institution located in an urban setting. The institution has approximately 1,800 undergraduate students with 65% of the undergraduate population commuting to campus.

Participant Selection

This study drew upon the Fall 2021 enrollment rosters for full-time undergraduate students at the four sites. Demographic information was collected through the survey instrument and data was filtered to ensure participants met the following criteria:

- Classified as a “commuter student” meaning the participant was not currently residing in on-campus housing.
- Has commuted to campus for at least one semester
- Has been at the institution for at least one semester

Instrument

This study utilized an adaptation of the General Belongingness Scale (Malone, et. al, 2012) to measure a participant’s sense of belonging. The General Belongingness Scale is a twelve-item instrument which uses a mixture of positive and negative phrased questions to assess an individual’s perception of belonging. The instrument utilizes a five point Likert Scale to

identify an overall General Belongingness Score for the individual. Half of the statements were positively phrased and were scored in the following manner:

- Strongly Agree – 5 points
- Agree – 4 points
- Neither Agree or Disagree – 3 points
- Disagree – 2 points
- Strongly Disagree – 1 point

The six statements which were negatively phrased had a reverse scoring associated with them, so a “strongly disagree” response would receive 5 points and a “strongly agree” response would receive 1 point. A participant’s total score for the twelve questions would be calculated to determine the overall belonging score for the individual. General Belongingness Scores closer to 60 indicate a stronger perception of belonging for the individual. The instrument has been shown to explain 68% of the variance and has an overall reliability of .92. The reliability coefficient, also known as Cronbach’s alpha, is a number between 0 and 1.00, with a number closer to 1 indicating a higher degree of reliability (Gravetter & Forzano, 2011).

General Belongingness Scale

1. I feel connected with others on campus.
2. I have found my place within the campus community.
3. When I am on campus, I feel like a stranger.
4. Because I don’t belong, I feel distant campus events and gatherings.
5. People will save me a seat in class or the dining hall.
6. I have close bonds with members of the campus community.
7. I feel isolated from the campus community.
8. I feel like a social outcast.
9. When I am on campus, I feel included.
10. I feel accepted by the campus community.
11. I feel as if people on campus don’t care about me.
12. I feel like an outsider when I am on campus.

Reverse score questions 3, 4, 7, 8, 11, and 12. Higher scores indicate a greater sense of belonging within the campus community.

In addition to assessing the participants sense of belonging, the instrument asked participants to report their cumulative college grade point average (GPA) using the following scale:

1. 2.00 or lower
2. 2.01 – 2.50
3. 2.51 – 3.00
4. 3.01 – 3.50
5. 3.51 – 4.0

Supplemental questions were asked to identify how the participant is engaging with the campus community:

1. How many semesters have you commuted to campus?
2. Where do you live? Off-Campus with family, with friends, on own, in Greek housing or residence hall
3. Do you belong to a Greek Life Organization?
4. Do you belong to a student organization?
5. How many student organizations do you belong to?
6. Do you hold a leadership position within a student organization?
7. How many university sponsored activities (home athletic games, campus programs, student organization meetings, intramurals, etc.) do you attend each month?
8. Do you participate in club sports or intramurals?
9. How many club sports or intramurals do you participate in?
10. Do you have an on-campus job?
11. Do you have an off-campus job?

- 12. How many hours do you work each week?
- 13. How many hours do you spend on campus each week outside of class?
- 14. Do you have a faculty/staff mentor on campus?
- 15. What is your identity? Race & LGBTQ+
- 16. Have you connected with individuals on campus who share your identity?
- 17. How have you connected to the campus community?

The researcher recognizes there are many other factors which contribute to belonging which are not explored within the scope of this study. In order to help quantify a student’s sense of belonging through their connection to the campus community and to inform future research, the survey included an optional open-ended question at the end which asked participants to briefly describe how they are connected to the campus community. Responses to this question will be categorized and the frequency in which the response occurred will be reported.

Study Variables

Research Question 1

Table 1

Research Question 1 Variables

Independent Variable	Dependent Variable
Belonging Score from GBS	Grade Point Average

Research Question 2

Table 2

Research Question 2 Variables

Independent Variable	Dependent Variable
# Semesters Commuting	Belonging Score from GBS
Belong to Greek Life Organization	
Belong to Student Organization	
Leadership Position in Organization	
Number of Organizations	
Intramural / Club Sports Participation	
Number of Intramural or Club Sports	
# of Monthly Events Attended	
On-Campus Employment	
Off Campus Employment	
Hours Worked Each Week	
Hours On-Campus Outside of Class	

Survey Distribution

The instrument was turned into an online survey for ease in both disseminating the survey and the data collection process (Creswell, 2014). Student Affairs leaders at each site were contacted to serve as a “champion” of the survey at their institution. In this role, they were responsible for either providing a list of emails for prospective study participants or sharing the link and survey information to the identified population on their respective campuses. For those champions who were sharing the survey on the researcher’s behalf, they were provided with an introductory email and survey link unique for their institution to share with participants at their site.

In exchange for encouraging participation from their commuter student population, the champion at each institution was provided with a final report of both commuter student belonging and the ways in which their students are connected to the campus community. As an incentive for survey completion, participants at each institution site were provided an

opportunity to take part in a drawing for a number of Amazon gift cards in exchange for completing the survey.

Research Questions

RQ1. What is the relationship between sense of belonging and student success for students who commute to campus?

RQ2. Based off items in the General Belonginess Scale, what factors contribute to the sense of belonging of students who commute to campus?

Analysis of Research Questions

To investigate research question one, a bivariate correlation was used to determine if a relationship exist between a participant's sense of belonging score, as determined by the General Belonginess Scale, and the participant's GPA. The ordinal scale for identifying GPA resulted in a non-normal distribution of responses with a large number of responses indicating a 3.5 – 4.0 GPA and very few responses indicating a GPA below 2.0. To create a more normal distribution, responses indicating a GPA of 2.0 or lower, 2.01 – 2.50 and 2.51 – 3.0 were grouped together and recoded to be 3.0 or lower. Numerous statistical tests exist for identifying the correlation between data points; however, specific tests are more appropriate depending upon the characteristics of the data. Spearman Rho correlations are most appropriate for non-parametric data sets which utilize ordinal scales (Fields, 2013). Since the data being analyzed was non-parametric in nature, the Spearman's Rho correlation test was utilized. A univariate analysis of variance (ANOVA) was used to further examine the relationship between sense of belonging and student success as defined by GPA.

To investigate research question two, the independent variables collected through the supplemental questions in the survey were analyzed using linear regression and ANOVAs to determine which variable were independently significant in predicting sense of belonging. Those variables which were determined to have a statistically significant influence on sense of belonging on their own were then included in a comprehensive model and analyzed for significance using an analysis of covariance (ANCOVA).

Summary

This chapter discussed the research methodology for the study through a description of the selected institutions, participants, instrument and survey distribution and an overview of the data analysis to be conducted. Chapter four will present the results of the data analysis.

Chapter Four: Results

The purpose of this research study was to explore the effects of one's sense of belonging through the following research questions:

RQ1. What is the relationship between sense of belonging and student success for students who commute to campus?

RQ2. Based off items in the General Belonginess Scale, what factors contribute to the sense of belonging of students who commute to campus?

Study Demographics

The total number of respondents in the study was 319 which included a mix of students who commuted to campus and those who live on campus in residence halls. All study participants completed the same survey and data was segregated into two groups – students who commuted to campus and a comparative group of residential students –based on a participant's response indicating their residential status. Of the 319 participants, 232 were classified as a commuter student and 85 were classified as a residential student. Summary descriptive data for these two groups is outlined in Table 3.

The belonging scores for residential and commuter students for each institution are reported in Table 5. A 2x4 2-way univariate analysis of variance (ANOVA) between sense of belonging scores at study sites and between commuter and residential students was not significant suggesting no significant difference exist between the two populations ($p = 0.662$, $F = 0.712$). This finding of non-significance meant it was appropriate to continue the study by combining the data from all four institutions into one large data set which was segregated by commuter status.

Table 3

Summary of Participants by Site

Site	N
Site A	159
Site B	126
Site C	16
Site D	16

Table 4

Summary of Participant Demographics

Identity	N
Asian or Pacific Islander	21
Black or African American	13
Hispanic	11
Native American or Alaskan Native	3
White	257
Multiracial or Biracial	21
LGBT	63

Table 5

Group Statistics for Belonging Score

	Study Site	N	Mean	SD
Site A	Commuter	157	41.24	10.47
	Residential	2	40.00	19.79
Site B	Commuter	55	40.15	9.98
	Residential	71	42.05	12.70
Site C	Commuter	2	41.07	9.75
	Residential	14	54.5	4.94
Site D	Commuter	6	40.33	14.06
	Residential	10	37.7	8.24
Total	Commuter	232	40.94	10.35
	Residential	85	41.78	12.35

Note: ANOVA of belonging scores between sites and commuter status: $p=0.662$, $F=0.712$

Research Question 1

Means and standard deviations of the measured variables are shown in Table 6 while Table 7 shows the bivariate correlation of sense of belonging scores and grade point average

(GPA). An examination of the bivariate correlations in Table 7 shows a significant relationship does exist between sense of belonging and student success ($r = 0.205, p = 0.002$).

Table 6

Means and Standard Deviations of the Measured Variables

Variable		M	SD	N
GPA	0 - 3.0	37.97	9.95	38
	3.01 – 3.5	39.23	10.65	61
	3.51 – 4.0	42.59	10.34	133
Belonging Score		40.95	10.35	232

Table 7

Spearman’s Rho Correlation Among Measured Variables

	Belonging Score	GPA
Belonging Score		0.205
GPA	0.205	

Note: All correlations are significant at $p < 0.01$ (2-tailed). $N = 232$

An ANOVA was conducted to determine the effects of student success on sense of belonging (see Table 8). Results from the ANOVA suggest as a student’s GPA decreases below a 3.5 so will their overall sense of belonging: $p=0.016, F=4.185$. Students with a GPA from 3.01 – 3.5 could expect to see a 3.36-point decrease in their sense of belonging score and students with a 3.0 or lower could expect to see a 4.61-point decrease in their belonging score.

Table 8

Test of Between-Subject Effects

GPA	B	SE	Sig	Partial Eta Squared	95% Confidence Interval	
					Lower Bound	Upper Bound
3.0 or Below	-4.613	1.879	0.015	0.026	-8.315	-0.911
3.01 - 3.5	-3.357	1.580	0.035	0.019	-6.469	-0.245
3.51 - 4.0	-	-	-	-	-	-

$R^2 = 0.035; p = 0.016; F = 4.185$

Research Question 2

A regression analysis and ANOVA were utilized to determine which of the independent variables contributes to a commuter student’s sense of belonging. Results of the regression analysis (see Table 9) suggest the numbers of semesters a student commutes to campus has a negative effect on their sense of belonging while the number of events attended each month and the amount of time spent on campus each week outside of class have a positive effect on the student’s sense of belonging.

Table 9

Summary of Regression Analyses of Independent Variables

Variable	B	b	SE	<i>p-value</i>	F	R ²
# Semesters Commuting	-0.963	-0.189	0.349	0.006	7.60	0.036
Monthly Event Attendance	1.95	0.413	0.28	<0.01	47.02	0.17
Weekly Hours on Campus	0.945	0.256	0.24	<0.01	16.18	0.066

The results of the regression analyses suggest that for each semester a student commutes to campus, the student’s sense of belonging will decrease by 0.963 points (p=0.006, F=7.60). Similarly, the results suggest that a student’s sense of belonging will increase by 1.95 points for each university sponsored event (student organization meetings, campus programming, home athletic events, etc.) the student attends each month and the student’s sense of belonging will increase by 0.945 points for each hour outside of class the student spends on campus each week.

The results from the ANOVA of categorical variables (see Table 10) suggest a student’s participation in Greek life, student organizations, campus leadership roles and intramurals or club sports all have a small, but positive influence on one’s sense of belonging. While

identifying as an underrepresented minority – either ethnic or being a member of the LGBTQ+ community – and not having a connection to others who share your identity were associated with a negative effect on one’s sense of belonging.

Table 10

Summary of Individual ANOVA Results

Variable	B	F	R ²	p-value
No Greek Life	-5.651	9.387	0.039	0.02
No Student Organization	-3.852	7.998	0.034	0.005
No Leadership Role	-5.521	13.032	0.062	<0.001
No IM / Club Sport	-5.549	9.665	0.040	0.002
No URM Status	6.148	24.817	0.075	<0.001
No Identity Connection	-7.180	23.263	0.068	<0.001

Independent variables which were found to be statistically significant in isolation were placed into a model to determine their effect on sense of belonging when all variables were present – a situation which would more accurately represent a typical student experience. Results of this ANCOVA (see Table 11) suggest the average monthly event attendance for an individual, the number of hours one spends on campus outside of class and whether or not the individual holds a leadership position on campus are the only variables which significantly influence one’s sense of belonging: $p < 0.001$; $F = 2.857$; $R^2 = 0.388$.

Table 11

ANCOVA Results: Between-Subject Effects & Parameter Estimates

Variable	F	B	R ²	p-value
Semesters Commuting	1.274	-0.433	0.009	0.261
Event Attendance	13.790	1.439	0.087	<0.001
Hours on Campus Outside Class	8.417	0.861	0.055	0.004
Participates in Greek Life	0.093	0.478	0.001	0.760
Member of Student Organization	0.628	6.397	0.004	0.429
Has a Leadership Role	6.161	12.096	0.041	0.014
Participates in IM / Club Sport	3.055	-17.617	0.021	0.083
Member of a URM	1.528	-4.954	0.01	0.218
Indicates an Identity Connection	1.644	-.29.457	0.011	0.202
Model Summary	2.857		0.388	<0.001*

**Indicates significance at 0.05 or below*

It is likely that individuals have ways in which they feel connected to the campus community and establish a sense of belonging which were not included as independent variables in this study. To identify if there are other ways in which one’s sense of belonging is positively influenced, study participants were provided an opportunity at the end of the survey to share how they define their connection to the campus community. A summary of these responses is included in Table 12.

Table 12

Response Frequencies for How Participants Define Their Connection to Campus Community

Connected How?	Frequency of Response
No or Minimal Connection	31
Student Organizations or Campus Activities	65
Peers in Class/Major/Academic Program	55
Faculty	10
Friends On Campus	42
Teammates / Athletic Program	18
Recognizing People / Feeling Comfortable on Campus	7
Volunteering	1

Participants were asked to identify the barriers which prevent them from being more involved in the campus community. A summary of these hindrances is included in Table 13.

Table 13

Response Frequencies for Hindrance to Involvement in the Campus Community

Hindrance	Frequency of Response
Employment	139
Family Obligations	85
Friends Outside of Campus Community	80
Studying	215
Other	98

Note: Participants were encouraged to select all that apply

Summary

Chapter Four presents results of the 319 individuals from four different institutions who completed the Commuter Student Sense of Belonging Survey. Of the 319 participants, 232 of the participants were classified as commuter students and 87 were classified as residential. There was no statistically significant difference between the means reported for commuter students and residential students. The data collected in the survey indicated a correlation does exist between student success, as defined by GPA, and one's sense of belonging. Statistical analyses of the data suggest the average number of events one attends each month, the amount of time one spends on campus outside of class and involvement on campus as a student leader all have a significant positive impact on one's sense of belonging. Further discussion of these findings and recommendations for increasing sense of belonging for students who commute to campus will be addressed in chapter Five.

Chapter Five: Discussion

Overview

This study sought to expand the available literature on students who commute to campus by exploring their student experience. Prior to this study, the available research on students who commute to campus was both minimal and dated. Additionally, many of the prevailing theories for student development and facilitating student success either explored jointly students who lived on campus and students who commuted to campus as undergraduate students, even though they have very different student experiences, or the researchers ignored commuter students entirely and focused only on those students who lived on campus. As a reminder from the review of literature in Chapter 2, students who commute to campus traditionally lack institutional support when compared to the support offered to their residential counterparts such as residential assistants to encourage connection and involvement in the university community and immersive experiences with the surrounding campus community. Specifically, this study explored the relationship between sense of belonging and student success as defined by grade point average and the factors which contribute to one's sense of belonging. To measure sense of belonging, participants were asked to rank their agreement with twelve statements about belonging using a five-point Likert scale. Participants were also asked to answer questions which quantified their involvement outside of the classroom, mainly around traditional student engagement initiatives such as campus activities, student organizations, intramurals, etc. Additionally, participants were asked to share the identities they hold and whether they had a connection to other individuals with those identities.

This chapter will present the significant findings from this dissertation study and discuss the practical implications associated with the research findings. Additionally, this chapter will

discuss the limitations of this research study and make recommendations for future research studies as a result of these findings and this research process. As a review, this dissertation research study had two questions it sought to answer.

RQ1. What is the relationship between sense of belonging and student success for students who commute to campus?

RQ2. Based off items in the General Belonginess Scale, what factors contribute to the sense of belonging of students who commute to campus?

Summary of Significant Findings

Student Success & Belonging

Existing research has suggested a correlation exist between student success and a student's involvement in the campus community. Astin (1984) found that academic performance is a direct correlation of student involvement and Kuh (2008) suggest a student's involvement within the campus community is a strong predictor of the student's success; however, neither of these studies segregated the campus population to determine if the findings are applicable to a commuter population alone – a student population thought to be less connected to the campus community due to their absence in traditional aspects of the college student experience associated with creating a sense of belonging. The data analysis from this study found that a student's involvement in the campus community, whether through the number of campus events attended, time spent on campus outside of class, belonging to a student organization, etc., are statistically significant in predicting one's sense of belonging. With this understanding, one could reasonably infer that a student's overall sense of belonging score is also indicative of their involvement in the campus community. The data collected in this study suggest that a correlation exists between student success and sense of belonging for students who commute to campus ($R =$

0.205 and $p = 0.002$), confirming the findings of Astin (1984) and Kuh (2008) and extending the available scholarship on student development theory by indicating these theories are also applicable to the sub population of students who commute to campus.

This correlation between the student's success and sense of belonging was further explored through a regression analysis to identify the strength of the relationship between student success, defined by grade point average, and a student's sense of belonging. Results of the regression analysis suggest that as a grade point average decreases, one could expect the student's sense of belonging to also decrease. An individual with a grade point average below 3.5 points could expect to have a decrease in their overall sense of belonging score by 3.36 points and for students with a grade point average below 3.0 points, the student could expect their sense of belonging score to drop 4.61 points. The relationship between sense of belonging and student success have been documented by other studies (Goodenow, 1993; Abdollahi & Noltemeyer, 2018; Benishek & Lopez, 2001), but findings from this study are unique to the impact a commuter student's sense of belonging has on their success in the classroom and highlight the importance institution's should place on student engagement to provide opportunities for student success.

Identity & Belonging

Data from this study suggests the number of semesters one has commuted to campus had a negative impact on the student's sense of belonging. A regression analysis of the number of semesters one commutes to campus and the sense of belonging score suggests that for each semester a student commutes to campus, one could anticipate the belonging score for that student to decrease 0.96 points. Meaning, as a commuter student one is already at a disadvantage in terms of their sense of belonging and potential for student success which means it is critical for

student's to find ways to establish their sense of belonging. Findings from Strayhorn (2019) and Jacobs & Archie (2008) suggest the important role a community is in establishing a sense of belonging. Similar to Maslow's postulation of a hierarchy of needs (1954), Strayhorn (2019) suggest a student cannot reach their full academic potential until they have found their acceptance. Strayhorn (2019) suggests affinity groups unique to one's identity, passion and interests are helpful in establishing a sense of belonging and finding belonging is often the motivation for a student's decision to join a specific group or organization. Similarly, Jacobs & Archie (2008) found campus communities, specifically, fraternity and sorority life organizations, student organizations, learning communities and sport teams, to be most impactful in a student's ability to establish a sense of belonging. The data from this dissertation research study confirms the findings of Strayhorn (2019) and Jacobs & Archie (2008) are also applicable to students who commute to campus since neither of those two studies looked at students who commute to campus specifically and instead these two studies made generalizations about undergraduate students as a whole or specific minoritized populations of undergraduate students. Results from this dissertation research study found that students who identify as an ethnic minority or identified as a member of the LGBT community could expect a decrease of 6.14 points on their sense of belonging score and not belonging to a student organization results in a decrease of 3.85 points in one's sense of belonging.

The study's findings regarding the effect minoritized status and membership in an organization have on one's sense of belonging highlight the care higher education administrators must take to ensure all students can find their place within the campus community. The 6 point decrease in the belonging score for a student who has a minoritized identity means those students with a minoritized identity are also disadvantaged in achieving student success as indicated in the

above correlation between belonging and student success; however, this effect can be somewhat mitigated if these students are connected through affinity groups or student organizations based on shared identities. The study also found that approximately 20% of the participants at all four institutions identified as a member of the LGBT community. This is a slight increase from a previous study on sexual orientation which found approximately 17% of individuals on a college campus identify as a member of the LGBT community (Association of American Universities, 2020). This finding on the importance one's identity and the connection around their identity plays with an individual's sense of belonging will become more important as the number of minority identifying individuals on a campus, whether minoritized through their ethnicity or sexual orientation, continues to rise on college campuses.

Engagement & Belonging

The seminal research on student engagement espouses the benefits of a student's involvement. Astin (1984) postulates student involvement has a significant influence on the development and ultimately the outcomes of a student and Tinto (1993) suggests that a student's involvement both in the academic and co-curricular environments has a significant impact on both their academic success and persistence at the specific institution. This study sought to see what components of a student's involvement were most impactful in influencing their sense of belonging. Results of this study suggest the number of events one attends each month, the time spent on campus outside of class, holding a leadership position on campus and membership within a student organization all play a significant role in influencing one's sense of belonging. A regression analysis was conducted to explore to what extent these variables influence one's sense of belonging and determined that one could expect a belonging score to increase by 1.95 points for each university sponsored activity one attended each month and by 0.945 points for

each hour one spent on campus outside of class. These findings provide a granular understanding of the impact involvement has on a student's outcomes and provides additional context to the postulated benefits of Astin (1984) and Tinto (1993). Kuh (2001) found that the distance from campus was impactful in predicting the involvement of a student who commutes to campus. Findings from this study further the assertion of Kuh (2001) and suggest the frequency in which a commuter student is on campus outside of class is also impactful in predicting their involvement and belonging.

More profound than event attendance and hanging out on campus outside of class, the study found that holding a leadership position resulted in nearly a 12-point increase in one's sense of belonging score. This finding is a direct reflection of Astin (1984) postulation that the quality and quantity of one's engagement has a direct correlation to the quality of the student's development. In this case, the intimate experience and added support network associated with being a student leader has a profound impact on the student's sense of belonging and likely both their academic success and persistence.

It is reasonable to assume no student, whether commuting to campus or not, has a campus experience in which the independent variables explored in this study would be isolated. For that reason, all the independent variables which were significant on their own – event attendance, time on campus, semesters commuting, minoritized identity, organization membership and student leadership position – were analyzed jointly as a comprehensive model through an ANCOVA. Results of this statistical test suggest the time spent on campus outside of class, the number of campus activities one attends each month and holding a leadership position are most impactful on a commuter student's sense of belonging. The resulting model with these variables is responsible for explaining nearly 40% of the variance associated with predicting one's sense of

belonging ($r^2 = 0.388$; $p < 0.001$). The findings from this model reiterate the findings of Tinto (1993) and Astin (1993) which postulated the critical role integration into social environments and quality interactions in co-curricular settings can have on student development.

Lastly, students were asked to share how they defined their connection the campus community. Not surprisingly, the majority of responses indicated their connection was through traditional student engagement initiatives such as student organizations or campus programs; however, the second most frequent response indicated connection was through peers in class or academic programs. The importance of finding one's place within the campus community is critical for student success and the results from this question reiterate the importance one's curricular setting or academic major can play in establishing an identity and finding acceptance within the campus community (Strayhorn 2019).

Implications for Practice

Despite the belief of many that higher education exists solely for the development of young adults, higher education is a business and must make decisions which are in the best interest of the institution (Craig, 2015). The landscape for higher education continues to evolve and this is especially true for revenue streams for higher education institutions. Both state and federal appropriations have decreased over time and this trend is expected to continue over time placing additional pressure upon tuition revenue from student enrollment and student persistence. Private, not-for-profit institutions, like the sites being used in this study, rely heavily on student enrollment, specifically, tuition and student fees, as a primary revenue source for the institution's operations (Goldstein, 2012). The preference of the chief financial officers for these institutions would be to maximize the number of students who are being retained at the institution from semester to semester and year over year to maintain a healthy institutional budget. With that

understanding, it would behoove an institution to invest in initiatives which have shown to positively affect the institution's rate of student persistence such as those initiatives which can positively affect the student's sense of belonging.

Traditional forms of student engagement such as student organizations and campus activities were shown to be effective at increasing the sense of belonging for students who commute to campus; however, these initiatives are only effective if students participate. Results from the study suggest students who commute to campus are limited in their campus involvement as a result of employment and family commitments. With the understanding of what else is vying for the time of a student who commutes to campus, higher education administrators need to consider alternative ways for enhancing commuter student involvement such as the timing of engagement initiatives to ensure they are able to be attended by students who commute to campus and are impactful for those students. This goal could be achieved by offering early in the semester a traditional large-scale program, which unite the campus community and introduce peers to one another, during the day-time hours rather than late at night or on weekends. It is understood the undergraduate student body is composed of both students who matriculate as first-time full-time student and those who transfer to the institution after enrolling at a different institution previously; however, the recommendations presented in this chapter would be especially beneficial to implement during the new student orientation and first year student experience. The first few days on campus provide a critical window and opportunity for students to find their place within the campus community. In addition to benefiting the first-time full-time student population, the campus engagement initiatives focused on connections early in the academic calendar will also be profoundly beneficial for returning students – a population which

is frequently overlooked with institutional initiatives focused on social connection and student persistence.

Strayhorn's (2019) College Student Belonging Theory suggest the importance of identity in establishing one's sense of belonging. Prevailing research suggest the importance identity plays in establishing one's sense of belonging; however, one's identity in this instance extends beyond our normal definition and should include academic interests and passions. Research from Strayhorn (2019) and Jacobs & Archie (2008) highlights the positive outcomes associated with a student having a community. These findings suggest institutions should invest resources in programs which connect and provide support for students, especially those of underrepresented identities since they have been shown to have additional barriers in establishing a sense of belonging. Institutional sponsored programs can be campus departments focused on creating inclusion on campus and supporting specific identities or intentional programs for students of specific underrepresented identities. Additionally, institutions should consider ways to not only help students determine their identities, but also connect with others in the campus community who share that identity. This could be an informal assessment provided during the week of welcome experience for first year students or continued conversations about interest and passions incorporated into the first-year student experience throughout the first semester. The connections resulting from the informal assessment or continued conversation do not need to be through formal organizations, but rather only need to be opportunities for students to find their place within the campus community by connecting with other individuals like themselves.

In addition to ensuring programmatic and co-curricular engagement initiatives are conducive to commuter student involvement, institutions should also consider ways to ensure equity for the commuter student experience. Outside of residence halls many institutions do not

have leisure spaces for students. In light of the findings from this study, it would be beneficial for institutions to create both spaces and opportunities for students who commute to campus to remain on campus beyond the time they spend in a classroom. These facilities should not be something which further isolates the student from the regular campus community, such as a designated lounge, but rather something which allows the commuter student to comfortably remain a part of the vibrancy of the campus community similar to the common spaces available to residential students.

Lastly, the data from this study suggests that Student Affairs professionals alone cannot be responsible for creating a sense of belonging on their campus. Responses from the survey indicate a large number of students define their connection to the campus community through their peers in class and their academic programs which highlights the importance for faculty members to facilitate social connections and interactions within their classrooms similar to a cohort model. This is more difficult to achieve with lower-level courses since students will have a variety of classes and different students in each of those courses; however, as a student begins to take only courses in their academic area of study, the ability for faculty to impact and create social connection in the academic setting increases. In addition to encouraging social interactions between classmates before and during class; faculty members should promote, or make their students aware of, campus engagement opportunities in which students can continue to cultivate their relationships with one another outside of the classroom. This continued focus on finding their place within the campus, but within and outside of the curricular setting, is integral to helping to establish one's sense of belonging.

Limitations

The design of this study took steps to achieve generalizable findings for similar students who commute to campus, yet despite the researcher's best efforts there are still numerous limitations within this study. All data collected in the study was self-reported by participants and the researcher assumes provided survey responses are accurate and honest. As is true with any survey, the responses collected can be a reflection of the participant's current mindset and not an accurate reflection of the participant's true responses. A few of the responses to the open-ended question asking participants to define their connection to the campus community were expletive laden and suggest those individuals might be overly negative in evaluating both their sense of belonging and campus experience.

The study was able to collect approximately 300 responses which surpassed the responses goals set by the researcher and identified by a power analysis; however, the responses across the four institutions are somewhat skewed with two institutions collecting the bulk of the responses. This study relied heavily on an individual at each institution, rather than the researcher, to serve as the "champion" of the study in collecting responses amongst their student body. Conversations between the researcher and the "champions" highlighted the various approaches institutions took to disseminate the study. It is very apparent those "champions" who distributed the survey through an email containing only the survey messaging and link were much more successful than those institutions who included the survey information within a weekly student newsletter. It was also evident the name and title associated with the sender of the email had an effect on the response rate at that specific institution. This variation in dissemination methods and student perceptions to the survey request created a limitation with survey responses and the generalizability of the findings.

Finally, one cannot overlook the effects the on-going pandemic has taken on the mental health and daily lives of individuals. Institutions of higher education have taken momentous steps to mitigate the spread of COVID-19 on their campuses and in doing so have also created an unintentional shift to their campus cultures through the suspension of many normal campus activities commonly associated with the student experience and establishing belonging. In addition to the suspension of those activities not deemed “COVID-Friendly” – e.g., large scale programming, student organization travel, etc. – many students also faced family and external pressures to change their campus routines and actively avoid or participate differently in institutional sponsored engagement initiatives. These mitigation efforts were successful in helping to stop the spread of COVID-19 at institutions of higher education, but likely had dramatic effects on the ability for students to connect with peers and establish a sense of belonging within their campus community. If replicated again outside of the COVID-19 pandemic, one could expect to see an increase in both the sense of belonging scores and the number of activities in which a student participated.

Recommendations for Future Research

Although the data collected was successful in providing answers for the research questions posed for the study, the data also highlighted other areas in which future research should be conducted. This study sought to explore commuter student sense of belonging through a quantitative lens and was successful in identifying factors which have an influence on one’s sense of belonging. Both the findings of this study and the data collected throughout the research process provide a small glimpse into the life of a student who commutes to campus; however, to truly understand the experience and to refresh the literature on this population, an in-depth qualitative analysis would be helpful. A qualitative study investigating the commuter student

experience would be able to provide additional information to the question of how a commuter student establishes their belonging within the campus community and which university sponsored activities are most impactful for a student to establish their sense of belonging and what are the true hindrances to involvement for a student who commutes to campus.

Additionally, a duplication of this study but with different institutions would be beneficial.

Currently, the results of this study are generalizable toward four-year, private, not-for-profit institutions with fewer than 3,000 undergraduate students, but it is not known if the findings would remain constant for larger private institutions, regional public institutions or large public institutions. One would expect the commuter population at a public institution to be greater than that of a small private institution, so the findings on commuter student belonging would be even more beneficial to administrators at these institutions.

Seminal research on sense of belonging within an educational setting identified a correlation between perceived acceptance by one's faculty and the ultimate academic success and persistence of that student, followed by perceived acceptance of one's peer's being the second strongest predictor (Goodenow, 1993). The methodology of Goodenow (1993), as well as other studies replicating the exploration of the effects of sense of belonging, focus on the outcomes associated with an achieved sense of belonging rather than what are the main factors contributing to it. Those studies which do begin to explore the factors which influence one's sense of belonging take a similar approach to the variables selected for this dissertation and rely on traditional means of student engagement – e.g. student organizations, campus activities, athletic teams, etc. Responses from the open-ended question asking students to define how they are connected to the campus community suggest campus activities and student organizations play a role in how students define their connection; however, the second most frequent response given

involved connection with peers in class or their major. Further research should be done to determine how strong the influence of peers in class and one's academic program is on one's sense of belonging when compared to the traditional initiatives for student engagement in which most institutions of higher education invest their resources.

The General Belongingness Scale utilized in this study has been shown to be effective at measuring one's sense of belonging and this specific study has presented the positive benefits associated with establishing a sense of belonging. There is a potential for institutions to modify the instrument of this study to be used as tool for preemptively identifying students at risk for achieving their full academic potential and also those at risk of not persisting at the institution. If this instrument was utilized again for a similar study, it could be beneficial to expand the instrument to include additional questions which provide participants the opportunity to share in depth about their involvement, connection and hindrances rather than only responding via predetermined multiple choice answers.

As the world slowly emerges from the COVID-19 global pandemic, one cannot wonder what effect the pandemic had on not only sense of belonging, but also the commuter student experience in general. It would be beneficial to re-administer the survey to the same institutions or similar institutions after society has recovered from the COVID-19 pandemic to see if a significant difference exists in the belonging scores reported by students who commute to campus and if the factors which were found to influence sense of belonging remain constant or if other independent variables are found to be more influential than previously discovered.

Finally, one of the questions asked participants to identify all of the identities they hold. It was surprising to see that nearly 20% of the respondents at all four institutions indicated they identify as a member of the LGBT community; this number is substantially higher than a recent

Gallup poll (2021) which suggests nationally 5.6% of the population identifies as LGBT, but the results are similar to a study by the Association of American Universities (2020) which found approximately 17% of undergraduate and graduate students identify as LGBT. The piece of this finding which was somewhat surprising is the majority of these schools are religiously affiliated with Christian denominations which can be construed to have a complicated relationship with the LGBT community. Strayhorn (2019) highlighted the importance identity played in establishing a sense of belonging and feeling accepted within a community, so it would be beneficial for further research to explore why students identifying as members of the LGBT community have sought out to enroll in institutions affiliated with religious traditions opposed to private non-denominational institutions or public institutions.

Summary

This dissertation study explored the sense of belonging for students who commute to campus. Through this research study, the prevailing theories on student development were shown to also be applicable to students who commute to campus since previous research did not segregate populations between residential and commuter students. Additionally, the findings of this study provide a significant update to the available literature on students who commute to campus and their engagement experience with previous studies on the commuter student experience taking place more than ten years ago. As both the number of students who commute to campus increases and funding at higher education institutions decreases the findings discussed in this chapter will be beneficial for those higher education administrators who are charged with making decisions regarding resource distribution and the creation of university initiatives aimed at increasing student involvement, persistence and ultimately student success.

References

- Abdollahi, A. & Noltemeyer, A. (2018). Academic hardiness: Mediator between sense of belonging to school and academic achievement? *The Journal of Educational Research*, 111(3), 345-351.
- Alfano, H. J., & Eduljee, N. B. (2013). Differences in work, levels of involvement, and academic performances between residential and commuter students. *College Student Journal*, 47(2), 334-342.
- American College Health Association. (2020). Considerations for reopening institutions of higher education in the COVID-19 era.
- Association of American Universities. (2020). Report on the AAU campus climate survey on sexual assault and misconduct.
- Astin, A. (1984). Student involvement: A development theory for higher education. *Journal of College Student Personnel*, 25(4), 297-308.
- Astin, A. W. (1993). What matters in college: Four critical years revisited. San Francisco, CA: Jossey-Bass.
- Astin, A. (1999). Student involvement: a development theory for higher education. *Journal of College Student Development*, 40(5), 518-529.
- Benishek, L. A., & Lopez, F. G. (2001). Development and initial validation of a measure of academic hardiness. *Journal of Career Assessment*, 9, 333-352.
- Berger, J. B. & Milem, J. F. (1999). The role of student involvement and perceptions of integration in a casual model of student persistence. *Research in Higher Education*, 40(6), 641-664.
- Bozick, R. (2007). Making it through the first year of college: The role of students' economic

- resources, employment, and living arrangements. *Sociology of Education*, 80(3), 261-285.
- Brooks, S. E. (2010). The connection between residence life and first-year student retention at the University of Pittsburgh. *The Journal of College and University Student Housing*, 37(1), 12-23.
- Brooman, S., & Darwent, S. (2014). Measuring the beginning: A quantitative study of the transition to higher education. *Studies in Higher Education*, 39(9), 1523-1541.
- Burlison, M. B. (2015). Nonacademic commitments affecting commuter student involvement and engagement. *New Directions for Student Services*, 150, 27-24
- Cabrera, A. F., Nora, A., & Castaneda, M. B. (1993). College persistence: structural equations modeling test of an integrated model of student retention. *The Journal of Higher Education*, 64(2), 123-139.
- Craig, R. (2015). *College disrupted: The great unbundling of higher education*. St. Martin's Press.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed method approaches*. Sage Publications.
- Deci, E. L. & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.
- Dugan, J. P., Garland, J. L., Jacoby, B., & Gasiorski, A. (2008). Understanding commuter student self-efficacy for leadership: A within-group analysis. *NASPA Journal*, 45(2), 282-310.
- Elkins, D. J., Forrester, S. A., & Noel-Elkins, A.V. (2011). The contribution of campus

- recreational sports participation to perceived sense of campus community. *Recreational Sports Journal*, 35(1), 24-34.
- Field, A. (2014). *Discovering statistics using IBM SPSS Statistics* (4th ed.). SAGE Publications.
- Freeman, T. M., Anderman, L. H., & Jensen, J. M. (2007). Sense of belonging in college freshmen at the classroom and campus level. *The Journal of Experimental Education*, 75(3), 203-220.
- Furr, S. R., & Elling, T. W. (2000). The influence of work on college student development. *NASPA Journal*, 37(2), 454-470.
- Gefen, D. R., & Fish, M. C. (2013). Adjustments to college in nonresidential first-year students: The roles of stress, family, and coping. *Journal of First-Year Experience and Students in Transition*, 25(2), 95-115.
- Gerdes, H. & Mallinckrodt, B. (1994). Emotional, social, and academic adjustment of college students: A longitudinal study of retention. *Journal of Counseling & Development*, 72, 281-287.
- Gianoutsos, D. & Rosser, V. (2014). Is there still a considerable difference? comparing residential and commuter student profile characteristics at a public, research, commuter university. *College Student Journal*, 48(4), 613-628.
- Gravetter, F. J., & Forzano, L-A. B. (2011). *Research methods for the behavioral sciences* (4th ed.). Wadsworth.
- Goldstein, L. (2012). *A guide to college & university budgeting: Foundations for institutional effectiveness* (4th ed.). NACUBO.
- Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *The Journal of Early Adolescence*, 13(1), 21-43.

- Hagerty, B. M. & Patusky, K. L. (1995). Developing a measure of sense of belonging. *Nursing Research*, 44(1). 9-13.
- Hagerty, B. M., Williams, R. A., Coyne, J. C., & Early, M. R. (1996). Sense of belonging and indicators of social and psychological functioning. *Archives of Psychiatric Nursing*, 10(4). 235-244.
- Hall, W. M., & Valine, W. J. (1977). The relationship between self-concept and marital adjustment for commuter college students. *Journal of College Student Personnel*, 18(4). 298-300.
- Hoffman, M., Richmond, J., Morrow, J., & Salomone, K. (2002). Investigating “sense of belonging” in first-year college students. *Journal of College Student Retention*, 4(3), 227-256.
- Horn, L. & Berktold, J. (1998). *Profile of undergraduates in U.S. Postsecondary Education Institutions: 1995-1996*. Office of Educational Research and Improvement, U.S. Department of Education.
- Howard, J. R. (2005). An examination of student learning in introductory sociology at a commuter campus. *Teaching Sociology*, 33(2), 195-205.
- Hybertson, D., Hulme, E., Smith, W. A., & Holton, M. A. (1992). Wellness in non-traditional-age students. *Journal of College Student Development*, 33(1), 50-55.
- Jacobs, J. & Archie, T. (2008). Investigating sense of community in first-year college students. *Journal of Experiential Education*, 30(3), 282-285.
- Jacoby, B. (2015). Enhancing commuter student success: What’s theory got to do with it? *New Directions for Student Services*, 150. 3-12.
- Jacoby, B. (2000). Why involve commuter students in learning? *New Directions for Higher*

Education, 109. 3-12.

Jacoby, B. & Garland, J. (2004). Strategies for enhancing commuter student success. *Journal of College Student Retention: Research, Theory and Practice*, 6(1), 61-79.

Jacoby, B. (1989). The student as a commuter: Developing a comprehensive institutional response. ASHE-ERIC Higher Education Report, George Washington University School of Education and Human Development.

Johnson, J. L. (1997). Commuter college students: what factors determine who will persist or who will drop out? *College Student Journal*, 31(3), 323.

Jones, J. (2021). LGBT identification rises to 5.6% in latest US estimate. *Gallup News*.

Kezar, A. & Kinzie, J. (2006). Examining the ways institutions create student engagement: the role of mission. *Journal of College Student Development*, 47(2), 149-172.

Kim, D. & Rury, J. (2011). The rise of the commuter student: Changing patterns of college attendance for students living at home in the United States, 1960-19080. *Teacher College Record*. 113 (5) 1031-1066.

Krause, K. D. (2007). Social involvement and commuter students: The first-year student voice. *Journal of the First-Year Experience and Students in Transition*, 19(1), 27-45.

Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J. & Gonyea, R. M. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *The Journal of Higher Education*, 79(5), 540-563.

Kuh, G. D., Gonyea, R. M. & Palmer, M. (2001). The disengaged commuter student: Fact or fiction. *Commuter Perspectives*, 27(1) 2-5.

Kuh, G. D., & Pike, G. R. (2005). A typology of student engagement for American college and universities. *Research in Higher Education*, 46(2), 185-209.

- LeClair, M. S. (2021, June 15). For college finances, there's no 'return to normal': The critical problems facing higher education won't end with the pandemic. *The Chronicle of Higher Education*.
- Lopez Turley, R. N. & Wodtke, G. (2010). College residence and academic performance: Who benefits from living on campus? *Urban Education*, 45(4), 506-532.
- Lowes, J., & Gayle, V. (2007). Exploring the work/life/study balance: The experience of higher education students in a Scottish further education college. *Journal of Further and Higher Education*, 31(3), 225-238.
- Malone, G., Pillow, D., & Osman, A. (2011). The general belongingness scale (GBS): Assessing achieved belongingness. *Personality and Individual Differences*, 52, 311-316.
- Martin, G. L., Kilgo, C. A. (2015). Exploring the impact of commuting to campus on psychological well being. *New Directions for Student Services*, 150. 35-43.
- Maslow, A. H. (1954). *Motivation and Personality*. Harper & Row.
- Milem, J. F. & Berger, J. B. (1997). A modified model of college student persistence: Exploring the relationship between Astin's theory of involvement and Tinto's theory of student departure. *Journal of College Student Development*, 38(4), 387-400.
- Mooney, C. & Becker, B. (2021). Investigating the impact of the COVID-19 pandemic on computing students' sense of belonging. 10.1145/3408877.3432407.
- Morrow, J. A. & Ackermann, M. E. (2012). Intention to persist and retention of first-year students: The importance of motivation and sense of belonging. *College Student Journal*, 46(3), 483-491.
- National Center for Education Statistics (NCES). (2014). *Profile for undergraduate students: 2011-2012*.

- Newbold, J. (2015). Lifestyle challenges for commuter students. *New Directions for Student Services, 150*, 79-86.
- O'Keefe, P. (2013). A sense of belonging: Improving student retention. *College Student Journal, 47*(4), 605-613.
- Pascarella, E.T., & Terenzini, P.T. (2005). *How college affects students. Volume II: A decade of research*. Jossey-Bass.
- Rutledge, P. B. (2011, November 8). Social networks: What Maslow misses. *Psychology Today*, retrieved from: www.psychologytoday.com.
- Santos, L. (2020). How does the COVID-19 pandemic influence the sense of belonging and decision-making process or nursing students: The study of nursing student experiences. *International Journal of Environmental Research and Public Health*.
- Schuchman, H. (1974). Special tasks of commuter students. *The Personnel and Guidance Journal, 52*(7), 465-470.
- Simpson, D. B. & Burnett, D. (2017). Commuters versus residents: The effects of living arrangements and student engagement on academic performance. *Journal of College Student Retention: Research Theory & Practice, 0*(0), 1-19.
- Strauss, L. C. & Volkwein, J. F. (2004). Predictors of student commitment at two-year and four-year institutions. *The Journal of Higher Education, 75*(2) 203-227.
- Strayhorn, T. (2011). Bridging the pipeline: Increasing underrepresented students' preparation for college through a summer bridge program. *American Behavioral Scientist, 55*(2), 142-159.
- Strayhorn, T. (2019). *College Students' Sense of Belonging*. Routledge.
- The Ohio State University's Center for the Study of Student Life (2021). *Wellness assessment*

2020-2021: Examining students' wellness and sense of belonging during the COVID-19 pandemic.

Tinto, V. (1993). *Leaving College: Rethinking the Causes and Curses of Student Attrition* (2nd ed.). University of Chicago Press, Chicago, IL.

Tovar, E. & Simon, M. (2010). Factorial structure and invariance analysis of the sense of belonging scales. *Measurement and Evaluations in Counseling and Development* 43(3), 199-217.

Appendix A

Survey Instrument

Exploration of Sense of Belonging for Commuter Students Informed Consent Page

Dear Survey Participants:

You are being invited to complete the following survey to measure your sense of belonging and the ways you create belonging on your college's campus. There are no reasonably foreseeable risks associated with your participation in this study. Your participation may or may not benefit you directly. However, the information learned in this study may be helpful to others. The data you provide will help inform best practices for college and university administrators to consider as they create programs and support services for students who commute to campus. The questionnaire will take approximately 10 minutes of your time to complete. Your completed questionnaire will be stored at Bellarmine University. Individuals from the Annsley Frazier Thornton School of Education and the Bellarmine University Institutional Review Board may inspect these records. In all other respects, however, the data will be held in confidence to the extent permitted by law. Should the data be published, your identity will not be disclosed.

Please remember that your participation in this study is voluntary. By completing this survey, you are voluntarily agreeing to participate. You are free to decline to answer any particular question that may make you feel uncomfortable or which may render you prosecutable under law. Further, at the end of the survey you will have an opportunity to share your email to be entered into a drawing for a \$25 Amazon gift card. Neither your email, nor your identity, will be shared as a part of this research study.

You acknowledge that all your present questions have been answered in language you can understand. If you have any questions about the study, please contact Bryan Hamann at bhamann@bellarmine.edu. If you have any questions about your rights as a research subject, you may call the Institutional Review Board (IRB) office at 502-272-8032. You will be given the opportunity to discuss any questions about your rights as a research subject, in confidence, with a member of the committee. This is an independent committee composed of members of the University community and lay members of the community not connected with this institution. The IRB has reviewed this study.

Sincerely,

Bryan Hamann

Please read the following statements and rate your level of agreement with the statement. For the purpose of this study, connection and belonging refer to the feeling of being accepted, included, supported and respected by others.

1. I feel connected with others on campus.
Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree

2. I have found my place within the campus community.
Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree
3. When I am on campus, I feel like a stranger.
Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree
4. Because I don't belong, I feel distant at campus events and gatherings.
Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree
5. People will save me a seat in class or in the dining hall.
Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree
6. I have close bonds with members of the campus community.
Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree
7. I feel isolated from the campus community.
Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree
8. I feel like a social outcast.
Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree
9. When I am on campus, I feel included.
Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree
10. I feel accepted by the campus community.
Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree
11. I feel as if people on campus don't care about me.
Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree
12. I feel like an outsider when I am on campus.
Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree
13. I am proud to be at my college.
Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree

Please complete the following questions to provide information about your experience on campus.

14. Please indicate your cumulative grade point average.
 - a. 0 – 2.0
 - b. 2.01 – 2.5
 - c. 2.51 – 3.0
 - d. 3.01 – 3.5
 - e. 3.51 – 4.0

15. Please select the option which best describes where you live.
- Off-Campus with Family
 - Off-Campus with Friends
 - Off-Campus on Own
 - In a Fraternity or Sorority House
 - Residence Hall
16. If you commute to campus, how many semesters have you commuted?
17. Do you belong to a fraternity or sorority?
- Yes
 - No
18. Do you have a Faculty or Staff member as a mentor?
- Yes
 - No
19. Do you belong to a student organization?
- Yes
 - No
20. If yes, how many organizations do you belong to?
21. If you are in an organization, do you hold a leadership position?
- Yes
 - No
22. Do you participate in club sports or intramurals?
- Yes
 - No
23. If yes, how many club sports or intramural sports do you play?
24. How many university sponsored activities (home athletic games, campus programs, student organization meetings, intramurals, etc.) do you attend each month?
- 0
 - 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8+

25. Do you have an on-campus job?
- Yes
 - No
26. Do you have an off-campus job?
- Yes
 - No
27. If you have a job, approximately how many hours do you work each week?
28. Outside of class, approximately how many hours do you spend on campus each week?
- 0
 - 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8+
29. Please briefly describe your connection to the campus community.
30. Which of the following hinder you from being more involved in the campus community?
Please select all that apply.
- Employment
 - Family Obligations
 - Friends Outside of School
 - Studying
 - Other
31. Which of the following best describes you?
- First Year Student
 - Sophomore
 - Junior
 - Senior
32. Please select all of the identities to which you belong.
- Asian or Pacific Islander
 - Black or African American
 - Hispanic or Latino
 - Native American or Alaskan Native
 - White or Caucasian
 - Multiracial or Biracial
 - Member of LGBTQ+
 - Other

33. Have you connected with individuals on campus who share your identity?
- Yes
 - No
34. If you have connected with others who share your identity, please share the ways you have.
- I have friends who share my identity.
 - I belong to an identity based organization.
 - I have mentors who share my identity.
 - I have not connected with someone who shares my identity.
 - Other

For participating in the study, you can be entered into a drawing for a \$25 Amazon gift card. Six winners will be selected from your school. Please share your email address below if you would like to be entered into this drawing. Your email address will not be tied to your responses and will not be shared with anyone.